

# Exhibit 32

IN THE UNITED STATES DISTRICT COURT  
FOR THE SOUTHERN DISTRICT OF WEST VIRGINIA  
CHARLESTON DIVISION

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)  
B.P.J. by her next friend and) mother, HEATHER JACKSON, )  
)  
Plaintiff, )  
) No. 2:21-cv-00316  
vs. )  
)  
WEST VIRGINIA STATE BOARD OF )  
EDUCATION, HARRISON COUNTY )  
BOARD OF EDUCATION, WEST )  
VIRGINIA SECONDARY SCHOOL )  
ACTIVITIES COMMISSION, W. )  
CLAYTON BURCH in his official) capacity as State )  
Superintendent, DORA STUTLER,) in her official capacity as )  
Harrison County )  
Superintendent, and THE STATE) OF WEST VIRGINIA, )  
)  
Defendants. )  
)  
LAINEY ARMISTEAD, )  
)  
Defendant-Intervenor. )  
-----

REMOTE VIDEOTAPED DEPOSITION OF  
CHAD T. CARLSON, M.D., FACSM  
Monday, March 28, 2022  
Volume I

Reported by:  
ALEXIS KAGAY  
CSR No. 13795  
Job No. 5122881  
PAGES 1 - 227

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FOR THE SOUTHERN DISTRICT OF WEST VIRGINIA  
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LAINEY ARMISTEAD, )  
)  
)  
Defendant-Intervenor. )  
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Videotaped deposition of CHAD T. CARLSON,  
M.D., FACSM, Volume I, taken on behalf of Plaintiff,  
with all participants appearing remotely, beginning  
at 9:01 a.m. and ending at 3:19 p.m. on Monday,  
March 28, 2022, before ALEXIS KAGAY, Certified  
Shorthand Reporter No. 13795.

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16 MITCH REISBORD - VERITEXT CONCIERGE

17  
18 Videographer:

19 KIMBERLEE DECKER

20  
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23  
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Page 7



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## INDEX

WITNESS

EXAMINATION

CHAD T. CARLSON, M.D., FACSM

Volume I

BY MR. BLOCK

13

## EXHIBITS

NUMBER

DESCRIPTION

PAGE

Exhibit 80

Declaration of Dr. Chad T.  
Carlson, M.D., FACSM

27

Exhibit 81

Declaration of Dr. Chad T.  
Carlson, M.D., FACSM White Paper

28

Exhibit 82

CMDA Ethics Statement,  
Transgender Identification

33

Exhibit 83

Tack Document, "Proandrogenic and  
Antiandrogenic Progestins in  
Transgender Youth: Differential  
Effects on Body Composition and  
Bone Metabolism"

169

Page 8

1 Exhibit 84 "Suppression of endogenous 176  
2 testosterone production  
3 attenuates the response to  
4 strength training: a randomized,  
5 placebo-controlled, and blinded  
6 intervention study"

7  
8 Exhibit 85 Rider Document "Health and Care 215  
9 Utilization of Transgender and  
10 Gender Nonconforming Youth: A  
11 Population-Based Study"

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1 Monday, March 28, 2022

2 9:01 a.m.

3 THE VIDEOGRAPHER: Good morning. We are on  
4 the record at 9:01 a.m. on March 28th of 2022.

5 All participants are attending remotely. 09:01:01

6 Audio and video recording will continue to  
7 take place unless all parties agree to go off the  
8 record.

9 This is media unit 1 of the recorded  
10 deposition of Dr. Chad T. Carlson, taken by counsel 09:01:19  
11 for the plaintiff, in the matter of B.P.J., by her  
12 next friend and mother, Heather Jackson, versus  
13 West Virginia State Board of Education, et al.,  
14 filed in the U.S. District Court, Southern District  
15 of West Virginia, Charleston Division, Case 09:01:38  
16 Number 2:21-cv-00316.

17 My name is Kimberlee Decker from Veritext  
18 Legal Solutions, and I am the videographer. The  
19 court reporter is Alexis Kagay.

20 I am not related to any party in this action, 09:01:54  
21 nor am I financially interested in the outcome.

22 Counsel and all present will now state their  
23 appearances and affiliations for the record. If  
24 there are any objections to proceeding, please state  
25 them at the time of your appearance, beginning with 09:02:07

Page 10

1 the noticing attorney.

2 MR. BLOCK: Good morning. This is Josh Block  
3 from the ACLU on behalf of Plaintiff. And I'll have  
4 my co-counsel introduce themselves.

5 MS. HARTNETT: Good morning. This is 09:02:22  
6 Kathleen Hartnett from Cooley, LLP, for Plaintiff.

7 MR. BARR: Good morning. Andrew Barr from  
8 Cooley, LLP, for Plaintiff.

9 MS. KANG: Good morning. Katelyn Kang from  
10 Cooley, LLP, for Plaintiff. 09:02:38

11 MS. HELSTROM: Hello. This is Zoe Helstrom  
12 from Cooley, LLP, for Plaintiff.

13 MS. PELET DEL TORO: Good morning. This is  
14 Valeria Pelet del Toro from Cooley, LLP, for  
15 Plaintiff.

16 COUNSEL SWAMINATHAN: Good morning. This is  
17 Sruti Swaminathan from Lambda Legal on behalf of  
18 Plaintiff.

19 MR. FRAMPTON: Good morning. Hal Frampton  
20 from Alliance Defending Freedom on behalf of the 09:02:57  
21 intervenor.

22 MS. CSUTOROS: Hello. Rachel Csutoros from  
23 Alliance Defending Freedom on behalf of the  
24 intervenor.

25 MR. TRYON: This is David Tryon with the 09:03:05

Page 11

1 West Virginia Attorney General's Office representing  
2 the State of West Virginia.

3 And just to clarify for the record, the time  
4 starting was Central Time, so 9:00 a.m., Central  
5 Time.

09:03:18

6 MR. CROPP: This is Jeffrey Cropp with  
7 Steptoe & Johnson representing defendant Harrison  
8 County Board of Education and Dora Stutler.

9 MS. MORGAN: This is Kelly Morgan with  
10 Bailey & Wyant representing the West Virginia Board  
11 of Education and Superintendent Burch.

09:03:34

12 MS. GREEN: This is Roberta Green,  
13 Shuman McCuskey Slicer, here on behalf of  
14 West Virginia Secondary School Activities  
15 Commission.

16 THE VIDEOGRAPHER: Thank you.

17 Will the court reporter please swear in the  
18 witness.

19 (Witness sworn.)

20 MR. BLOCK: Great.

21

22 CHAD T. CARLSON, M.D., FACSM,  
23 having been administered an oath, was examined and  
24 testified as follows:

25

Page 12

EXAMINATION

BY MR. BLOCK:

Q Good morning, Dr. Carlson. My name is  
Josh Block from the ACLU. I'll be taking your  
deposition today.

09:04:22

Could you state your whole name for the  
record.

A My name is Chad Thomas Carlson.

Q Have you ever had your deposition taken  
before?

09:04:30

A In a couple of local cases, yes.

Q All right. What were those?

A I can't recall. One was -- I -- I was  
retained as a witness in a traffic case and can't  
recall the -- and that never went to trial. And  
then I was retained as a witness in an injury case  
in a gym, and that also never went to trial. I was  
deposed in a local case once. I can't remember the  
circumstance. It was over ten years ago.

09:04:48

Q Do you remember if those cases were -- if any  
of those were in federal court?

09:05:11

A No, never --

Q Okay.

A -- in federal court.

Q Okay. So maybe you'll remember some of this

09:05:17

Page 13

1 discussion from ten years ago, but if not, here's a  
2 refresher. I just want to go over ground rules  
3 for -- for the deposition, and I have -- I have  
4 three main ground rules.

5 The first is that, you know, although we have 09:05:31  
6 the video, the court reporter is also trying to  
7 write down everything we say, so it's important that  
8 your responses be verbal, by saying "yes" or "no"  
9 instead of nodding or shaking your head.

10 Is that okay with you? 09:05:46

11 A I understand that, and that's fine.

12 Q Great. And -- and you didn't nod your head,  
13 which is what some people do in response to that  
14 first ground rule, so you're already off to a good  
15 start. 09:05:59

16 The second is, again, related to the  
17 transcript, that the court reporter can't write down  
18 when two people are talking at the same time, so  
19 it's important that you wait until I finish the  
20 question before you answer, and in return, I'll wait 09:06:10  
21 for you to finish your answer before I ask another  
22 question.

23 Does that sound fair?

24 A I appreciate that, and yes.

25 Q Okay. And the third is that, you know, it's 09:06:20

1 my job to ask questions that you understand and that  
2 you can provide an answer to. So if anything in my  
3 question is unclear, I'm asking you to let me know,  
4 and I will rephrase it, okay?

5 A Okay. 09:06:35

6 Q And if you do answer the question, I'm going  
7 to take that to mean that you understood it.

8 Does that sound okay to you?

9 A That's reasonable, yes.

10 Q Okay. How did you prepare for this 09:06:46  
11 deposition?

12 MR. FRAMPTON: Josh, real quick, before we do  
13 that, this seems like a good time to memorialize our  
14 typical understanding that all objections except to  
15 form and scope are reserved; is that fair? 09:07:03

16 MR. BLOCK: Yes. And we will agree again  
17 that although any defendant can object, an objection  
18 by one defendant preserves the objection for all of  
19 them.

20 MR. FRAMPTON: Okay. Thank you. 09:07:16

21 MR. TRYON: This is Dave Tryon. I agree with  
22 that.

23 MR. BLOCK: Okay. And unless another party  
24 speaks up, we'll take that as agreement for  
25 everyone. 09:07:34



1 BY MR. BLOCK:

2 Q Okay. How did you prepare for this  
3 deposition?

4 A I reread through my statement, I read through  
5 the Safer rebuttal, and I met with counsel several 09:07:43  
6 times and reviewed some of the citations in the  
7 paper.

8 Q In which paper?

9 A In my white paper, sorry.

10 Q When you say your white paper, are you 09:08:04  
11 referring to your expert report submitted in  
12 February of 2022?

13 A Yes.

14 Q Okay. Did you review any other -- any  
15 documents to prepare for this deposition besides 09:08:20  
16 your report and Dr. Safer's report?

17 A As I said, I reviewed some relevant papers,  
18 yes.

19 Q Did you review anything that wasn't already  
20 cited in your expert report? 09:08:36

21 A I -- I reviewed the FIMS paper from 2021. I  
22 reviewed a paper by Klaver. I reviewed some data  
23 on (technical difficulty) by Tomkinson.

24 Q I'm sorry, the audio cut out.

25 A I said, I reviewed some data on youth 09:09:18

Page 16

1 performance by Tomkinson.

2 I reviewed Gregg Brown's report.

3 Q Did you review a transcript of Dr. Brown's  
4 deposition?

5 A Can you clarify what you're asking? 09:09:40

6 Q Yeah. Did you -- so Dr. Brown had a  
7 deposition on Friday.

8 Have you reviewed a transcript of that  
9 deposition?

10 A No. 09:09:50

11 Q Okay. Is there any other additional research  
12 you conducted?

13 A Not that I can think of offhand.

14 Q Okay. So you -- you mentioned before, in  
15 response to my questions about whether you've had a 09:10:11  
16 deposition, some cases in which you had been a  
17 witness.

18 In which of those cases were you retained as  
19 an expert witness?

20 A I believe the -- well, I was -- none of 09:10:30  
21 these -- when -- when I was retained as -- I was  
22 retained in a witness in all of them, I believe.

23 Q Okay. So you weren't -- you weren't like  
24 a -- a firsthand witness to a traffic accident?

25 A No. No. I -- no. It had to do with the 09:10:49

1 nature of the injuries.

2 Q I see. So other than those three cases we  
3 discussed, is there any other case in which you've  
4 been retained as an expert witness?

5 A Oh. I'm sorry, yes, I have been retained by 09:11:03  
6 the State of Florida in a case similar to this. I'm  
7 sorry.

8 Q And have you submitted an expert report in  
9 that Florida case?

10 A I've submitted a different version of a white 09:11:20  
11 paper -- of the white paper that I submitted to the  
12 State of West Virginia.

13 Q And have you been deposed in that case?

14 A No.

15 Q Is there any other case in which you've been 09:11:36  
16 retained as an expert, even in a nontestifying role?

17 A Not that I can recall, no.

18 Q Okay. If -- if you recall over the course of  
19 this deposition, can you please bring that to my  
20 attention? 09:11:51

21 A Absolutely.

22 Q Okay. What -- what was your -- what is your  
23 hourly rate as an expert witness in this case?

24 A I'm being paid \$650 an hour for review and  
25 \$800 an hour for deposition time. 09:12:09

1 Q And is that the hourly rate you use in the  
2 Florida case as well?

3 A Yes.

4 Q Is that your standard hourly rate for -- for  
5 whenever you appear as an expert witness? 09:12:25

6 A For local cases, no.

7 Q What's your hourly rate for local cases?

8 A I'd have to go back and look, but I believe  
9 it's somewhere around \$500 an hour.

10 Q And -- and how did you determine that as your 09:12:40  
11 hourly rate?

12 A How did I determine what?

13 Q Sorry, the \$650 an hour, how did you  
14 determine that as your hourly rate?

15 A I can't speak to that. I -- it's the -- 09:13:02  
16 it's -- I was -- I tried to -- to be consistent with  
17 each state that is talking to me, and that's the  
18 rate we came down on.

19 Q Okay. So I have some questions for you just  
20 about terminology so we can make sure we're 09:13:46  
21 understanding each other.

22 Do you know what the term "cisgender" means?

23 MR. FRAMPTON: Object to the form.

24 And, Josh, can we do our standing objection  
25 as to terminology? 09:13:59

1 MR. BLOCK: Yes, absolutely.

2 MR. FRAMPTON: Thank you.

3 BY MR. BLOCK:

4 Q But you can answer. Do you know what the

5 term --

09:14:03

6 MR. FRAMPTON: Yes, go ahead and answer.

7 THE WITNESS: I'm familiar with the term,

8 yes.

9 BY MR. BLOCK:

10 Q Okay. What -- what do you understand the

09:14:07

11 term to mean?

12 A Well, the terminology is not what I use, but  
13 what I understand a cisgender individual to be is an  
14 individual who, for example, is a biologically born  
15 male who identifies as a male.

09:14:29

16 Q So if -- if I use the term "cisgender" in my  
17 questions, you can understand what I'm talking  
18 about?

19 A I can understand what you're talking about.

20 I would prefer the term "natal male," but...

09:14:42

21 Q Okay. Well --

22 A I can understand what you're talking about.

23 Q Okay. So -- so to you -- well --

24 A Or "biological male."

25 Q But to the extent that I want to distinguish

09:14:57

Page 20

1 between someone who is transgender and someone who  
2 is not, I -- I may ask you questions that -- that  
3 use the term "cisgender."

4 So just to confirm, I want to -- you will  
5 understand what I'm referring to when I say 09:15:15  
6 "cisgender"; correct?

7 A Yes, I will understand what you're referring  
8 to.

9 Q Okay. And do you know what the term  
10 "transgender" means? 09:15:22

11 A I believe I understand what you're saying,  
12 yes.

13 Q What -- what does it mean?

14 A I believe a transgender male, most likely by  
15 your definition, would be an individual that is born 09:15:33  
16 a certain sex but identifies as the opposite sex.

17 Q Okay. So if I use the word "transgender,"  
18 you'll know what I'm talking about?

19 A Yes, if you use the word "transgender," I  
20 will know what you're talking about. 09:15:55

21 Q Do you have any objection to using the word  
22 "transgender" yourself?

23 A I -- I choose to use the -- the term  
24 "biological male" and "biological female." I  
25 believe that that's an appropriate designator, but I 09:16:11

1 have -- I can understand your terminology, and I'm  
2 comfortable using it.

3 Q So -- so how -- so, in your words, if -- if  
4 you want -- you wanted to, you know, describe, you  
5 know, a -- a transgender woman and to distinguish 09:16:27  
6 between a transgender woman and a cisgender man, how  
7 would you -- how would you explain the difference  
8 between a transgender woman and a cisgender man,  
9 using your preferred terminology?

10 A I would probably use the -- 09:16:42

11 MR. FRAMPTON: Object to the form.

12 Go ahead and answer.

13 THE WITNESS: I would probably use the  
14 descriptor and just say a biological male  
15 identifying as female. 09:16:50

16 And, I'm sorry, you said cisgender what?

17 BY MR. BLOCK:

18 Q Man.

19 A Again, I would use the descriptor and say a  
20 biological male identifying as male. 09:16:59

21 Q Do you -- do you think that -- do you think  
22 that being transgender is a real thing?

23 MR. FRAMPTON: Object to the form.

24 THE WITNESS: Define what you mean by "real  
25 thing." 09:17:38

1 BY MR. BLOCK:

2 Q Well, do you think that -- do -- do you -- I  
3 think, you know -- well, what do you understand  
4 gender identity to be?

5 MR. FRAMPTON: Object to the form. 09:18:02

6 Go ahead.

7 THE WITNESS: Well, I was retained in this  
8 case as a witness for sports safety, so I don't know  
9 that I was really retained to provide an opinion  
10 here, but to the extent that I understand it, I 09:18:16  
11 understand gender identity to mean the extent to  
12 which a person perceives themselves as being a  
13 certain sex.

14 BY MR. BLOCK:

15 Q Did you receive any -- as part of your -- 09:18:45  
16 well, actually, I'll come back to that. I'm sorry  
17 for jumping ahead a little bit.

18 What -- you've been using the phrase  
19 "biological sex." What -- what's your understanding  
20 of what that term means? 09:18:58

21 A I would look to the -- the common parlance of  
22 that, which is the biological characteristics that a  
23 person is born with that -- that identify them as  
24 male or female. And if you want to extend it to  
25 chromosomal analysis, the great majority of people 09:19:22

Page 23



1 that subcategorize into XY or XX.

2 Q And how would you refer to the biological sex  
3 for the minority of people that don't subcategorize  
4 into XY or XX?

5 A Well, I --

09:19:40

6 MR. FRAMPTON: Object to the form.

7 Go ahead.

8 THE WITNESS: I'm a board-certified sports  
9 medicine physician. I'm not an endocrinologist.

10 And even though I've studied endocrinology to some 09:19:49  
11 extent in my training, I -- I wasn't really retained  
12 to offer an opinion on that.

13 BY MR. BLOCK:

14 Q Okay. So you're not offering an opinion  
15 today on -- on -- an expert opinion today on -- on 09:19:59  
16 the definition of biological sex?

17 MR. FRAMPTON: Object to the form.

18 Go ahead.

19 THE WITNESS: I was -- I was retained today  
20 to offer an opinion on the issue of sports safety as 09:20:14  
21 pertains to biological males crossing over into  
22 female sports.

23 BY MR. BLOCK:

24 Q So do you -- are you offering an expert  
25 opinion on the safety of people with DSDs, 09:20:29

Page 24

1 differences of sexual development, participating in  
2 women's sports?

3 MR. FRAMPTON: Same objection.

4 Go ahead.

5 THE WITNESS: My report does not speak to 09:20:46  
6 that specifically, no.

7 BY MR. BLOCK:

8 Q Okay. So do you know what complete androgen  
9 insensitivity syndrome is?

10 A I'm familiar with it, yes. 09:20:53

11 Q Okay. So you're not offering an expert  
12 opinion on the safety implications of allowing  
13 someone with complete androgen insensitivity  
14 syndrome to participate in women's sports; right?

15 MR. FRAMPTON: Object to the form. 09:21:09

16 Go ahead.

17 THE WITNESS: Well, first of all, my report  
18 speaks to safety issues and whether there are risks  
19 for (technical difficulty) faster individuals to  
20 participate in pools of athletes who don't share 09:21:30  
21 those same traits. It's not my job to create policy  
22 or decide which groups are more appropriate.

23 BY MR. BLOCK:

24 Q I understand that. I'm just trying to  
25 determine whether you're offering an expert opinion 09:21:44

1 on whether someone with complete androgen  
2 insensitivity syndrome, who has XY chromosomes, can  
3 safely participate in women's sports; right? You're  
4 not offering that opinion today?

5 A I am not.

09:22:02

6 MR. FRAMPTON: Object to the form.

7 Go ahead.

8 THE WITNESS: I -- I'm not offering that  
9 opinion, no.

10 BY MR. BLOCK:

09:22:07

11 Q Okay. Do you know what the term "sex  
12 assigned at birth" is?

13 A Do I know what the term -- can you --

14 Q Do you understand --

15 A I believe I do, yes.

09:22:26

16 Q Sure, sure.

17 What -- what do you understand the -- the  
18 term "sex assigned at birth" to refer to?

19 A I would bring that back to common parlance  
20 and just say that it's -- it's the determination  
21 that's made based on visual evidence at the time  
22 that the baby is born.

09:22:39

23 Q Okay. Thank you.

24 All right. Now we get to look at some

25 documents. So if you can get your Exhibit Share

09:22:57

1 ready, I'm going to mark the first document for you,  
2 and it will, hopefully, appear in your -- your  
3 folder as Exhibit 80. Let's see if that actually  
4 works.

5 (Exhibit 80 was marked for identification 09:23:20  
6 by the court reporter and is attached hereto.)

7 THE WITNESS: Do I need to hit refresh on  
8 this computer?

9 BY MR. BLOCK:

10 Q You -- you might. Actually -- 09:23:27

11 MR. FRAMPTON: I'll jump in. Yeah, as he  
12 adds exhibits, we're going to have to refresh for  
13 the exhibit to pop up in your folder.

14 Right?

15 MR. BLOCK: Yes. 09:23:38

16 And could we go off the record for a second?  
17 I have a question for the concierge, just about  
18 the -- the --

19 MR. FRAMPTON: Sure. That's fine with me.

20 THE VIDEOGRAPHER: We're off the record at 09:23:48  
21 9:24 a.m.

22 (Recess.)

23 THE VIDEOGRAPHER: We are on the record at  
24 9:24 a.m.

25 ///

1 BY MR. BLOCK:

2 Q All right. So if you can let me know when  
3 Exhibit 80 appears in your folder.

4 A Okay. I see it. I'm pulling it up.

5 Q Great. Do you recognize this document? 09:24:32

6 A Yes. I believe that this is the declaration  
7 I signed with the State of West Virginia.

8 Q Great. And what's the date on the document?

9 A February 23rd, 2022.

10 Q And that's your signature along with it? 09:24:51

11 A That is my signature, yes.

12 Q Okay. And have you filed any other reports  
13 or declarations in this case?

14 A I filed a copy of a white paper that speaks  
15 to sports safety. 09:25:12

16 MR. BLOCK: So I'm going to introduce  
17 Exhibit 81, which should appear in your -- in your  
18 folder in one second.

19 (Exhibit 81 was marked for identification  
20 by the court reporter and is attached hereto.) 09:25:28

21 THE WITNESS: Let me figure out how to close  
22 out of this.

23 So is it Exhibit G?

24 BY MR. BLOCK:

25 Q Yeah. So if you -- 09:25:46

1 A Yeah.

2 Q So if you look at the second page --

3 A Yes.

4 Q -- is that your -- your signature again,

5 Dr. Chad T. Carlson, M.D.?

09:25:54

6 A It is, yes.

7 Q Okay. And is this the -- the declaration and  
8 copy of the white paper that you're referring to?

9 A This was executed June 22nd, 2021, so I  
10 believe that this was prior to a preliminary  
11 injunction.

09:26:13

12 Q So it's submitted in connection with opposing  
13 the motion for preliminary injunction in this case?

14 A Correct, yes.

15 Q Okay. And if you go to the next page, it --  
16 it says, "White Paper by Dr. Chad Thomas Carlson,  
17 MD."

09:26:23

18 Do you see that?

19 A I do, yes.

20 Q And the date of that white paper is  
21 June 22nd, 2021; correct?

09:26:35

22 A Correct.

23 Q So that's the same day as your declaration is  
24 dated; correct?

25 A I'd have to -- I can look, but I -- yes, it

09:26:45

Page 29

1 is.

2 Q Have -- are there any earlier versions of  
3 this white paper that you've authored?

4 A Earlier than the June 22nd version that you  
5 have here? 09:27:02

6 Q Yes.

7 A No.

8 Q Okay. So you -- did you author this white  
9 paper specifically for purposes of this litigation?

10 A When you say "this litigation," do you mean 09:27:14  
11 West Virginia's suit?

12 Q Yes.

13 A No. It just -- the -- the timing of  
14 completion of it coincided with the -- the deadline  
15 for the case. 09:27:32

16 Q Who retained you to write this white paper?

17 MR. FRAMPTON: Objection to form.

18 Go ahead.

19 THE WITNESS: Alliance Defending Freedom.

20 BY MR. BLOCK: 09:27:42

21 Q And when did they retain you to write the  
22 white paper?

23 A I was contacted by ADF in, I believe,  
24 February of 2020, at a time that I was president of  
25 our national academy. 09:28:01

Page 30

1 Q What national academy?

2 A The American Medical Society for Sports  
3 Medicine.

4 It was, I believe, Christiana Holcomb, and  
5 she said that they had interest in retaining an 09:28:15  
6 expert to speak on sports safety with transgender  
7 sports for a pending litigation.

8 Q And you said this was in February 2020?

9 A Yes.

10 Q So about a year and a half before this white 09:28:31  
11 paper was finalized?

12 A Correct.

13 Q Okay. And did you -- so were you actually  
14 retained in February 2020?

15 A No. 09:28:47

16 Q Okay. When were you actually retained?

17 A It would have been towards the end of 2020.

18 Q And without --

19 A I had -- sorry.

20 Q No, you go ahead. 09:28:59

21 A I had made initial contact with Roger Brooks,  
22 following their -- their initial contact, and we had  
23 been scheduled to meet sometime the second week of  
24 March, and that was right when COVID exploded. I  
25 own a private practice, and our -- our volume went 09:29:36

Page 31



1 to about 15 percent of year before, and so we had  
2 other concerns, so... It deferred conversation of  
3 this for a while.

4 Q Are things looking better now?

5 A Yes. 09:29:57

6 Q Good. I'm glad to hear that.

7 So you -- so when -- you -- you say the  
8 initial contact was from ADF to you, not you to ADF;  
9 correct?

10 A Correct. 09:30:11

11 Q Okay. And without revealing any contents of  
12 your communications with ADF, do you have any  
13 independent understanding of why you might have been  
14 seen as a potential expert as opposed to some other  
15 person who does sports medicine? 09:30:34

16 MR. FRAMPTON: And just quickly, as -- as --  
17 as Mr. Block instructed you, don't reveal the  
18 substance of your conversations with folks at ADF,  
19 but to the extent you can answer the question  
20 without doing that, please do so. 09:30:49

21 THE WITNESS: Well, I can't speak to what  
22 people at ADF were thinking. I should say that I --  
23 I believe that the introduction was made through a  
24 third party, and I -- I believe that they probably  
25 got my name from Christian Medical/Dental 09:31:13

1 Association and their policy person, and I can't  
2 recall his name. And I think that the fact that I  
3 was head of our national organization at the time  
4 probably played into it.

5 BY MR. BLOCK:

09:31:40

6 Q What -- what is the Christian Medical/Dental  
7 Association?

8 A It's just an organization of Christian  
9 physicians and dentists. I have very little  
10 involvement with them. I pay dues periodically. 09:31:55

11 Q So you are a member of the Christian/Medical  
12 Dental Association?

13 A I might be. I honestly don't recall whether  
14 I'm current on my dues or not.

15 Q Okay. Have you read -- are you aware of the 09:32:10  
16 Christian Medical/Dental Association's policies with  
17 respect to transgender people?

18 A No, I'm not.

19 MR. BLOCK: Hold on. I'm going to -- if you  
20 give me half a second, I will show something to you. 09:32:41

21 This is going to pop up in your -- your  
22 folder as Exhibit 82, I believe. Let me know when  
23 you see it.

24 (Exhibit 82 was marked for identification  
25 by the court reporter and is attached hereto.) 09:33:16

Page 33

1 THE WITNESS: It's refreshing. Hold on.

2 Okay. I see it.

3 BY MR. BLOCK:

4 Q Okay. Have you ever seen this document

5 before? 09:33:23

6 A I don't believe so, no.

7 Q Okay. If you look at the -- the document --

8 here, I -- I want to give you, you know, the time,

9 whatever time you need, to look at it, but I would

10 like to just direct your -- your attention to -- let 09:33:41

11 me scroll down myself.

12 So if you go to page 2 of that document, near

13 the end, it says "Accordingly" -- do you see the --

14 the line that begins "Accordingly"?

15 A I do, yes. 09:34:12

16 Q Okay. And it says (as read):

17 "Accordingly, CMDA opposes medical

18 assistance with gender

19 transitions (sic) on the following

20 grounds." 09:34:21

21 Do you see that?

22 A Yes.

23 Q Okay. And do you -- do you also oppose

24 medical assistance with gender transition on

25 biblical grounds? 09:34:36

Page 34

1 MR. FRAMPTON: Object to the form and scope.

2 THE WITNESS: Can you clarify that question?

3 BY MR. BLOCK:

4 Q Sure. It says (as read):

5 "CMDA opposes medical assistance 09:34:44

6 with gender transition on the

7 following grounds."

8 And then it's -- there's a capital letter A,

9 and it says "Biblical." And there's about seven

10 different entries under -- biblical reasons for 09:35:00

11 opposing medical assistance with gender transition.

12 And -- and my question is, do you agree with

13 this part of this CMDA statement?

14 A Are you asking me to read --

15 MR. FRAMPTON: Objection -- 09:35:16

16 THE WITNESS: -- all of this?

17 MR. FRAMPTON: -- to form and scope.

18 THE WITNESS: Because I can right now.

19 BY MR. BLOCK:

20 Q Yeah, sure. 09:35:22

21 A Okay. Give me some time.

22 I just want to clarify. Are you asking me if

23 I agree with A, B, C, D, E -- and E?

24 Q I asked -- I'm asking you if you agree with

25 A. 09:38:00

1 A Okay. So I've -- I've read through that.

2 Q Okay. And do you agree with it?

3 MR. FRAMPTON: Objection; form and scope.

4 THE WITNESS: There's a lot in there to

5 unpack, so I -- I can't say I agree with all of 09:38:10

6 that. And I was retained as a witness in this case

7 to speak to sports safety. I wasn't retained to

8 provide an opinion in this regard.

9 And again, I had no interaction, really, with

10 CMDA as an organization. 09:38:34

11 BY MR. BLOCK:

12 Q Do you have any religious views about

13 transgender people that will have informed your

14 expert opinion in this case?

15 MR. FRAMPTON: Objection; form and scope. 09:38:57

16 You can answer.

17 THE WITNESS: I would say that my opinions in

18 this case are informed, just like UK Sport, entirely

19 on the science. I don't believe my religious

20 opinions really play into this. I would view my 09:39:19

21 role as providing a scientific opinion.

22 BY MR. BLOCK:

23 Q Okay. Does -- if you recall earlier, we --

24 we just had a discussion about, like, using the --

25 the word "transgender." 09:39:40

1 Do you have any religious beliefs that would  
2 preclude you from using the word "transgender"?

3 MR. FRAMPTON: Objection; form and scope.

4 THE WITNESS: No. I just -- I believe that  
5 it's best to speak with clarity, and I believe that 09:39:56  
6 in many circles of discussion with people who aren't  
7 familiar with these types of terms, it gets very  
8 confusing to people to keep track of what a  
9 transgender woman is or what a transgender man is.  
10 I have found that it's easier to refer to biological 09:40:15  
11 males and females and then refer to their gender  
12 identity.

13 THE REPORTER: I'm so sorry to interrupt.  
14 Mr. Frampton, I hear some background noise in your  
15 room. I don't know if there's a door you can shut.

16 MR. FRAMPTON: I'm sorry. This is  
17 Hal Frampton. It's -- it's -- I'm with the witness,  
18 and it's not in our room.

19 THE REPORTER: Okay. Kimberlee, do you know  
20 where it's coming from?

21 THE VIDEOGRAPHER: It looked like it was his  
22 mic.

23 But could we go off the record real quick?  
24 Off the record, is that all right?

25 MR. FRAMPTON: Sure. 09:40:50

1 MR. BLOCK: Yes.

2 THE VIDEOGRAPHER: Off the record at

3 9:41 a.m.

4 (Recess.)

5 THE VIDEOGRAPHER: We are on the record at 09:41:37

6 9:42 a.m.

7 MR. BLOCK: Thanks.

8 BY MR. BLOCK:

9 Q If you go to the -- the last page of this  
10 document -- 09:41:51

11 A Sorry, I got to go back.

12 Q Actually, page 14 of the document.

13 A They aren't numbered, so --

14 Q Which --

15 A The last page -- the last page of text. 09:42:06

16 Q This -- no, this should be the -- it's --

17 it's page 14 of the PDF. If you click on the

18 PDF with the --

19 A Oh, I see. Yeah. I -- I'm there.

20 Q Okay. So at the bottom, it says "A final 09:42:27  
21 comment on language."

22 Do you see that?

23 A Yes.

24 Q Okay. I'm just going to read this into the  
25 record. It says (as read): 09:42:36

Page 38

1 "Terms should be as descriptively  
2 accurate as possible while avoiding  
3 ideological programming. For  
4 instance, because an individual's  
5 intrinsic sex cannot be changed, and 09:42:44  
6 gender is essentially a biologically  
7 meaningless term or concept aside  
8 from biological sex, terms such as  
9 'transgender identity,' as if it  
10 were an objective reality, should be 09:42:56  
11 replaced by 'transgender-identified,  
12 -identifying, or -identification,'  
13 which are descriptively accurate.  
14 Similarly, because 'gender  
15 transition' is not ontologically or 09:43:05  
16 biologically possible, more  
17 descriptively accurate terms, such  
18 as, 'attempted transition efforts,'  
19 or 'attempted transition-affirming  
20 treatments or procedures,' are more 09:43:16  
21 accurate and preferred."

22 Did I read that correctly?

23 A You read it correctory -- correctly, yes.

24 Q Okay. Thanks.

25 Do you think that using the term 09:43:24



1 "transgender" amounts to ideological programming?

2 MR. TRYON: Objection.

3 MR. FRAMPTON: Objection; form and scope.

4 THE WITNESS: You cut out. I didn't hear the

5 question. I'm sorry.

09:43:36

6 BY MR. BLOCK:

7 Q Sorry. Sorry.

8 Do you think that the term "transgender" is a

9 form -- is ideological -- I'll rephrase it.

10 Do you think that using the term

09:43:45

11 "transgender" is ideological programming?

12 MR. FRAMPTON: Objection; form and scope.

13 THE WITNESS: Again, I was consulted into

14 this case as a board-certified physician to provide

15 an opinion on sports safety. To the extent that I

09:43:59

16 have an opinion on gender terminology, you know,

17 I've never thought of it in that way, no.

18 BY MR. BLOCK:

19 Q Okay. And do you --

20 A I've never even heard that description.

09:44:13

21 Q Okay. And do you think that -- that

22 transgender identity is not an objective reality?

23 MR. FRAMPTON: Objection; form and scope.

24 THE WITNESS: I don't believe I'm rendering

25 an opinion on that.

09:44:42

1 BY MR. BLOCK:

2 Q And you're not qualified to render an opinion  
3 on that; correct?

4 A On whether transgender -- what was the --  
5 restate it. 09:44:53

6 Q Transgender identity is an objective reality.

7 MR. FRAMPTON: Objection; form and scope.

8 THE WITNESS: I don't believe I am -- I've  
9 been retained to provide an opinion on that  
10 statement, no. 09:45:12

11 BY MR. BLOCK:

12 Q Do you have a personal opinion on that  
13 statement?

14 MR. FRAMPTON: Objection; form and scope.

15 THE WITNESS: Define what -- what's -- define 09:45:26  
16 an objective reality when it comes to gender  
17 identification. Can you tell me that?

18 BY MR. BLOCK:

19 Q Well, I'm just referring to the phrasing in  
20 this document. So do you not -- do you have an -- 09:45:37

21 A Restate your question one more time.

22 Q Sure. Do you have any personal opinions on  
23 whether transgender identity is an objective  
24 reality?

25 MR. FRAMPTON: Objection; form and scope. 09:45:47

Page 41

1 THE WITNESS: I don't know what it means to  
2 say that -- I don't know what objective reality with  
3 respect to transgender identification even is, so I  
4 don't think I can answer that question.

5 BY MR. BLOCK:

09:46:07

6 Q You're not offering any expert opinions in  
7 this case on whether gender identity has any  
8 biological underpinnings, are you?

9 A No, I'm not. Again, I've been retained in  
10 this case as a physician to provide on safety issues 09:46:37  
11 with respect to individuals who have transgender  
12 identification that are crossing over into other  
13 sports.

14 Q So -- so in that sentence, you use the term  
15 "individuals who have transgender identification" 09:46:56  
16 instead of "transgender individuals," which is  
17 similar to what this document says people should use  
18 in terms of language. So I'm just trying to explore  
19 why you're using the word "transgender  
20 identification" instead of "transgender 09:47:10  
21 individuals."

22 So why are you using the term "transgender  
23 identification" instead of "transgender  
24 individuals"?

25 MR. FRAMPTON: Objection; form and scope.

09:47:21

Page 42

1 THE WITNESS: I -- I don't know that I can  
2 speak to that. I mean, it -- it relates, in a  
3 sense, to the term "gender identity," does it not?

4 BY MR. BLOCK:

5 Q How so? 09:47:36

6 A Well, transgender identification speaks to  
7 identification. Identification is analogous to  
8 gender identity. I'm just trying to avoid confusing  
9 terms.

10 Q And you think saying "transgender 09:48:03  
11 individuals" is a confusing term?

12 A I didn't --

13 MR. FRAMPTON: Objection --

14 THE WITNESS: -- say that.

15 MR. FRAMPTON: -- form and scope. 09:48:07

16 THE WITNESS: You did.

17 BY MR. BLOCK:

18 Q I'm sorry, you and your counsel were talking  
19 over each other.

20 Do you think "transgender individuals" is a 09:48:15  
21 confusing term?

22 MR. FRAMPTON: Objection; form and scope.

23 Go ahead.

24 THE WITNESS: I -- I didn't say that it's a  
25 confusing term. I don't think it's confusing. I 09:48:23

Page 43

1 don't have a problem using it. I'm just -- I don't  
2 know.

3 BY MR. BLOCK:

4 Q So -- so I'll ask, again, an earlier  
5 question. Why do you use the phrase "transgender 09:48:40  
6 identification" instead of "transgender  
7 individuals"?

8 MR. FRAMPTON: Objection; form and scope.

9 THE WITNESS: I can't speak to that. I -- I  
10 can't tell you why I chose that term. 09:48:57

11 BY MR. BLOCK:

12 Q Okay. You don't know why?

13 A No.

14 Q Okay. Have you -- have you written anything  
15 else on the topic of transgender people? 09:49:13

16 A Written?

17 Q Yes. Besides this white paper and this  
18 expert report.

19 A Are you talking about -- define "written" for  
20 me. 09:49:34

21 Q Well, I guess I'll go through different types  
22 of writing.

23 Have you -- have you written any articles in  
24 professional journals about transgender people or  
25 the -- touching on the topic of transgender people? 09:49:46

Page 44

1 A No.

2 Q Have you written anything in popular media  
3 touching on the topic of transgender people?

4 A No.

5 Q Have you given any conference presentations 09:49:57  
6 or talks on the topic of -- touching on the topic of  
7 transgender people?

8 A No.

9 Q Have you disseminated any written document,  
10 in any way, authored by you on the -- touching on 09:50:15  
11 the topic of transgender people.

12 MR. FRAMPTON: Object to the form.

13 Go ahead.

14 THE WITNESS: Are you speaking to e-mail?

15 BY MR. BLOCK: 09:50:33

16 Q Sure. Have -- have you written -- have you  
17 written e-mails on the -- touching on the topic of  
18 transgender people?

19 A Yes.

20 Q Are these e-mails to -- to Listservs? 09:50:42

21 A No.

22 Q Who are these e-mails to?

23 A So in my role as president of AMSSM and on my  
24 time on the executive committee, occasionally this  
25 issue would -- would crop up, and there were 09:51:07

Page 45

1 discussions about it.

2 Q So I'd like, to the best of your ability, for  
3 you to recall the specific occasions on which this  
4 issue cropped up.

5 Can you remember any of them? 09:51:24

6 A Yep. The first time that I can recall it --  
7 let me back up and just say that we have --

8 MR. BLOCK: The witness's video froze for me.

9 THE VIDEOGRAPHER: Yeah, he looks frozen.

10 Let's go off the record. 09:51:54

11 BY MR. BLOCK:

12 Q Sorry, you're -- you froze for -- for that  
13 answer, so I think you were just telling me the --  
14 the first occasion of the list in which this issue  
15 cropped up. 09:52:06

16 A So I said that I was going to back up for a  
17 second and just say that our academy hosts several  
18 meetings each year, one of which is the annual  
19 meeting, and it's usually about five days long, and  
20 it's -- it's structured with different symposia that 09:52:20  
21 are themed. And periodically, particularly since, I  
22 don't know, 2016, maybe, when I was -- I don't --  
23 I'd have to think what year I went on to exec, maybe  
24 it was 2017, but there had been, once in a while,  
25 inquiries by members about whether there would be a 09:52:43

Page 46

1 transgender medicine symposium at the annual  
2 meeting, because there had never been one before.  
3 And so in 2018, as we were -- as my program chair  
4 and I were putting together content for the meeting,  
5 this issue briefly came up around that. 09:53:03

6 Q Was there a transgender medicine component to  
7 that symposium?

8 A That was -- that was for the annual meeting  
9 we had in Houston in 2019, and, no, we did not  
10 include that. 09:53:29

11 Q Why not?

12 A Well, there were lots of reasons, but we had  
13 a budget that we had to work from, and we already  
14 had a pretty strong sense of what we were wanting to  
15 pay for to bring in other speakers to that meeting, 09:53:49  
16 and I felt like if we were going to have a symposium  
17 on transgender -- on the transgender athlete, that  
18 it ought to be something that was structured with a  
19 point/counterpoint format and that we would probably  
20 want to bring in outside academicians to help create 09:54:12  
21 that dialogue.

22 Q Do most of -- do other components of the  
23 symposia have point/counterpoint formats to them?

24 A Often, yes.

25 Q What are some examples of -- of other 09:54:40



1 portions of the symposia that have had point and  
2 counterpoint formats?

3 A There's many examples, but one would be youth  
4 sport specialization versus having your child play  
5 in multiple different sports, point or counterpoint. 09:54:57

6 Q So you said there were several reasons why  
7 you didn't include a transgender medicine component  
8 of the symposium. What are some others?

9 A As I said, we were -- we already had a sense  
10 of what we wanted included in that meeting, and 09:55:22  
11 there's always topics that need to be left for  
12 future meetings, and that was --

13 Q Was -- sorry. Did you have a transgender  
14 medicine component of a future meeting?

15 A We haven't had an insight future meeting 09:55:38  
16 since that Houston meeting because of COVID, so --  
17 the 2020 meeting and the 2021 meeting were canceled.

18 Well, actually, I want to clarify.

19 The 2021 meeting was done virtually, and  
20 there was a transgender component to that meeting, 09:55:55  
21 yes.

22 Q What was the transgender component?

23 A I can't speak to it. I -- I wasn't part of  
24 it.

25 Q What do you mean you weren't part of it? 09:56:10

1           A    I mean I didn't have anything to do with  
2   organizing it.

3           Q    Did you attend it?

4           A    No.

5           Q    Why not? 09:56:23

6           A    Because the meeting was virtual, and I was  
7   down in Florida with my family at the time, and we  
8   were, I believe, at a park that day.

9           Q    Which one?

10          A    Which park? 09:56:38

11          Q    Yeah.

12          A    I don't remember which park we were at that  
13   day, but it was -- it was either Hollywood Studios  
14   or EPCOT or Magic Kingdom. I don't know.

15          Q    Is there a way to watch the transgender 09:56:52  
16   component of the virtual symposium after the fact?

17          A    I believe for a time there is. I don't know  
18   if I -- I don't know if it's still accessible,  
19   but...

20          Q    Do you know who the speakers were at that 09:57:11  
21   symposium -- at that transgender component of the  
22   symposium?

23          A    No, I don't recall.

24          Q    Do you recall the topic?

25          A    You mean the specific topics within sports 09:57:21

1 and transgenderism?

2 Q Yeah. At that symposium.

3 A No.

4 Q Now, by the time this symposium -- this  
5 portion of the symposium occurred -- well, actually, 09:57:45  
6 let me step back.

7 Around when did this 2021 virtual symposium  
8 occur?

9 A In April of 2021.

10 Q In that -- by the time it occurred, had you 09:58:03  
11 already been retained by ADF?

12 A Yes.

13 Q So did you think that the content of the  
14 symposium might relate to any of the topics on which  
15 you would be opining for ADF? 09:58:21

16 MR. FRAMPTON: Object to the form.

17 Go ahead.

18 THE WITNESS: I can't speak to that. I was  
19 already well into my work on the paper.

20 BY MR. BLOCK: 09:58:40

21 Q Did you think that the contents of the  
22 symposium might be helpful in providing you  
23 additional relevant information for you paper?

24 MR. FRAMPTON: Same objection.

25 THE WITNESS: I -- I feel like the process 09:58:54

1 that we went through to create that paper, that I  
2 went through to create that paper, was thorough, and  
3 I'm confident that we canvassed most of the  
4 available literature on the subject prior to the  
5 date of the paper being submitted. 09:59:19

6 BY MR. BLOCK:

7 Q You said "we canvassed."

8 Who do you -- who do you mean by "we"?

9 MR. FRAMPTON: Object to the form.

10 THE WITNESS: I mean Alliance Defending 09:59:37  
11 Freedom and myself.

12 BY MR. BLOCK:

13 Q Did Alliance Defending Freedom help provide  
14 you with papers to review?

15 MR. FRAMPTON: Objection to the form. 09:59:44

16 THE WITNESS: When we first sat down to flesh  
17 through what this paper might look like, I met with  
18 one of the attorneys from Alliance Defending  
19 Freedom, I outlined with him what we thought might  
20 be an appropriate take on this paper, and then both 10:00:06  
21 of us did literature searches. I compiled what I  
22 thought was relevant for the paper.

23 The paper is entirely mine.

24 BY MR. BLOCK:

25 Q What do you mean by that? 10:00:38

Page 51

1           A     That every line in that paper is my own words  
2     and thought.

3           Q     Is every line of the February 23rd, 2022,  
4     paper also your own words and thought?

5           A     I've reviewed every line in -- in both                   10:00:53  
6     papers, made extensive edits through it, and it  
7     represents my own thought completely, yes.

8           Q     All right. Well, first you said every line  
9     was your own words and thought, and then you said it  
10    represents your thoughts completely, and so I just           10:01:15  
11    want to get clarity.

12                   Is every line of the February 23rd paper your  
13    own words and thought?

14           MR. TRYON: I'm just going to object and make  
15    sure the witness understands that any communications       10:01:26  
16    between him and either this office or ADF is covered  
17    by the attorney-client privilege.

18           MR. FRAMPTON: Yes, same -- same objection.

19                   So we're not to discuss the substance of  
20    those communications.                                   10:01:42

21                   Go ahead.

22           THE WITNESS: Can you repeat the question?

23    BY MR. BLOCK:

24           Q     Yeah. Is every line of the February 23rd,  
25    2022, paper your own words and thought?                   10:01:52

1 MR. FRAMPTON: Same objection.

2 Go ahead.

3 THE WITNESS: The additions that were made to  
4 that paper are my additions, yes.

5 BY MR. BLOCK: 10:02:18

6 Q When did you first become interested on the  
7 topic of transgender women competing in women's  
8 sports?

9 A I -- I would say that I first became aware of  
10 it around the time that Joanna Harper had released 10:02:36  
11 her paper.

12 Q Which paper by Joanna Harper are you  
13 referring to?

14 A The -- the one where she published race times  
15 of transgender athletes that transitioned and -- and 10:03:03  
16 was comparing them to both their biological  
17 competitors and then -- and then their  
18 transgender -- was comparing race times and how they  
19 stratified both and after transition.

20 Q So this is her first paper? 10:03:30

21 A I -- yes. It was the first paper she  
22 published, yes.

23 Q And when did you read that paper first?

24 A I couldn't tell you. Years ago.

25 Q So you read it close to the time that it 10:03:42

1 first came out?

2 A I don't know if I -- I don't recall if I read  
3 it or if I was reading reference to it, but it would  
4 have been around that time.

5 Q What other reading on the topic of 10:03:54  
6 transgender women competing in women's sports had  
7 you done before you were first contacted by Alliance  
8 Defending Freedom?

9 A I don't know if it's -- it's not specific to  
10 transgenderism and sport, but McHugh's paper in the 10:04:24  
11 New Atlantis had come up around the issue, again,  
12 when I was at AMSSM, so that -- that had led to  
13 discussions about transgenderism.

14 Q It led to discussions at ASSM (sic)?

15 A Yeah, just with other -- other people there. 10:04:46

16 Q And what were those discussions?

17 A It -- well, the -- the paper had to do with  
18 the biological underpinnings of -- of gender  
19 identity.

20 Q How -- 10:05:01

21 A But --

22 Q How did -- I didn't mean to cut you off. Go  
23 on.

24 A So to your point, it's not directly related  
25 to transgenderism and sport. 10:05:10

Page 54

1 Q So in what context did it arise for  
2 discussion at AMSSM, then?

3 A There was discussion about a paper in a  
4 non-published newsletter on transgenderism in  
5 sports, and there was discussion about the way that 10:06:00  
6 that paper was being presented and whether it was  
7 contextually sound.

8 Q So the paper was sent in a newsletter?

9 A The paper was submitted for publication in a  
10 newsletter. 10:06:27

11 Q In what newsletter?

12 A It's called The Sideline Report.

13 Q And who publishes The Sideline Report?

14 A The American Medical Society for Sports  
15 Medicine. 10:06:37

16 Q And -- and who presented the paper for -- for  
17 submission?

18 A I don't recall his name.

19 Q Do you remember what the paper said,  
20 generally? 10:06:48

21 A It was -- it was a -- again, I -- it's been  
22 years since I've read that paper, but my  
23 recollection of it is that it was somewhat skewed in  
24 terms of its ideology.

25 Q Skewed -- 10:07:13



1           A    That it was -- it -- that it was not a  
2           balanced discussion of the pros and cons of  
3           transgender participation in sport.

4           Q    So in which direction was it skewed?

5           A    It was skewed towards more affirmative                   10:07:32  
6           participation.

7           Q    And so who -- who reviews the submissions to  
8           The Sideline Report?

9           A    At the time, people on the executive  
10          committee. It was shared with them.                   10:07:50

11          Q    And were you on the executive committee at  
12          that time?

13          A    Yes.

14          Q    And who raised concerns that it was not a  
15          balanced discussion?                   10:08:08

16               MR. FRAMPTON: Objection to the form.

17               Go ahead.

18               THE WITNESS: As I recall, I and some others  
19          on the committee raised concerns.

20          BY MR. BLOCK:                   10:08:24

21          Q    Did you say you and some others on the  
22          committee?

23          A    Correct.

24          Q    And who is the person that brought the McHugh  
25          article to folks' attention?                   10:08:37

1 A I did.

2 MR. FRAMPTON: Same objection.

3 BY MR. BLOCK:

4 Q Go ahead.

5 A I did. 10:08:41

6 Q So had you already read the McHugh article  
7 before -- before this incident arose?

8 A Well, I hadn't read the entire article,  
9 because it's extremely long, but going back to what  
10 we were talking about earlier, trying to decide what 10:09:01  
11 a transgender symposium what point and counterpoint  
12 might look like, one of the considerations at the  
13 time was whether to bring one of those authors to,  
14 you know, what would be the 2019 meeting to provide  
15 input against -- to provide input in -- in context 10:09:27  
16 of that issue.

17 Q So around when was this discussion about  
18 The Sideline Report article? What time?

19 MR. FRAMPTON: Objection to the form.

20 Go ahead. 10:09:46

21 THE WITNESS: I believe it would have been  
22 sometime in early 2020.

23 BY MR. BLOCK:

24 Q All right. So -- so I have --

25 A I don't recall that -- I -- I don't want to 10:10:01

1 say that. I don't recall that offhand. I'd have to  
2 go back and look.

3 Q Okay. So I want to make sure I just have a  
4 complete list of incidents in which this came --  
5 this topic related to transgender people came up for 10:10:06  
6 discussion.

7 So I have, from you, this discussion about  
8 the submission to The Sideline Report. I have, from  
9 you, this discussion in 2018 about whether or not to  
10 have a transgender medicine component to the 10:10:27  
11 upcoming symposium.

12 Are there any other times in which topics  
13 related to transgender people came up at ASSM -- or  
14 AMSSM?

15 MR. FRAMPTON: Objection to the form. 10:10:41  
16 Go ahead.

17 THE WITNESS: I can't recall that issue  
18 coming up in others, no.

19 BY MR. BLOCK:

20 Q And so how did you become aware of McHugh's 10:10:57  
21 paper?

22 A It was all over the news at the time that it  
23 came out.

24 Q Where in the news?

25 MR. FRAMPTON: Objection to the form. 10:11:20

1 Go ahead.

2 THE WITNESS: I can't tell you that. I get  
3 my news from lots of sources, so I can't tell you  
4 where I first heard of it.

5 BY MR. BLOCK: 10:11:27

6 Q Do you get your news from Ben Shapiro at all?

7 A No.

8 Q Do you view Ben Shapiro to be a reliable  
9 source of information?

10 MR. FRAMPTON: Objection to the form. 10:11:37

11 Go ahead.

12 THE WITNESS: I was not retained to provide  
13 an opinion there, but -- again, I was retained to  
14 provide an opinion as to the sports safety  
15 implications for transgender athletes crossing over 10:11:51  
16 into cisgender sporting events.

17 But to your point -- what -- what was your  
18 question?

19 BY MR. BLOCK:

20 Q Would -- would you view Ben Shapiro to be a 10:12:08  
21 reliable source of information on these matters?

22 A I have no --

23 MR. FRAMPTON: Objection --

24 THE WITNESS: -- opinion on that.

25 MR. FRAMPTON: -- to the form. 10:12:16

Page 59

1 BY MR. BLOCK:

2 Q I'm -- I'm sorry, can you -- can you say it  
3 again? Counsel and you were cross talking.

4 So I'll ask it again and wait for your  
5 counsel to object, and then you can answer, okay? 10:12:24

6 Do you view Ben Shapiro to be a reliable  
7 source of information on medical topics concerning  
8 transgender people?

9 MR. FRAMPTON: Objection to the form and  
10 scope. 10:12:35

11 Go ahead.

12 THE WITNESS: I have no opinion on that.

13 BY MR. BLOCK:

14 Q Well, you don't have any -- I -- I need an  
15 answer to the -- to the question. So if you can 10:12:44  
16 answer to the best of your ability --

17 A I don't know enough about Ben Shapiro's  
18 opinions to be able to state one way or the other  
19 what I think of them.

20 Q Okay. Do you know who Ben Shapiro is? 10:12:58

21 A Yes, I've heard of him.

22 Q Okay. Do you -- do you listen to him or --  
23 or watch his shows?

24 A No.

25 Q Would you ever rely on Ben Shapiro in 10:13:13

1 providing an expert opinion?

2 MR. FRAMPTON: Objection to the form and  
3 scope.

4 THE WITNESS: Are you asking if I would rely  
5 on Ben Shapiro to provide an expert medical opinion? 10:13:20

6 BY MR. BLOCK:

7 Q Yes.

8 A Of course not.

9 Q So at the time that you first talked with ADF  
10 about, you know, what a white paper would look like, 10:13:40  
11 had you already formed an opinion on the issue?

12 MR. FRAMPTON: Objection; form and scope.

13 Go ahead.

14 THE WITNESS: So, you know, I -- I've been  
15 practicing sports medicine for 20-plus years now, 10:13:53  
16 and I have lots of experience taking care of injured  
17 athletes. And so understanding that there was  
18 perhaps the possibility of larger individuals  
19 crossing over into sports where there were smaller  
20 individuals and, you know, participating in contact 10:14:19  
21 sports, I had concerns, but I hadn't really fully  
22 fleshed out an opinion, no. I believed that I went  
23 into the process of data review with open eyes.

24 Q What does that mean, you went into the  
25 process of data review with open eyes? 10:14:41

1           A     That I went to the data that was culled,  
2       looking to see what the data spoke to in terms of  
3       sports safety. I didn't have a predetermined bias  
4       or view. Well, I didn't have a predetermined answer  
5       to that question, that's what I would say.

10:15:09

6 Q Now, did -- were you -- when you discussed  
7 being retained to provide this white paper to ADF,  
8 were -- were you -- did you discuss compensation at  
9 the same time?

10           A    I don't -- I don't recall -- I don't believe       10:15:32

11       compensation came up until later.

12 Q Do you know if you had arrived at the  
13 conclusion that it was safe for transgender women to  
14 participate, would you have received compensation  
15 from ADF for -- for work done in reaching that 10:15:51  
16 opinion?

17 MR. FRAMPTON: Objection; form and scope.

18 THE WITNESS: There's a lot in that question.

19 Can you restate it, please?

20 BY MR. BLOCK: 10:16:01

21 Q Sure. You said that when you began your  
22 writing process, after being retained from ADF, you  
23 didn't have a predetermined view of what the  
24 question would be, and so my question is whether  
25 your compensation was in any way related to whether 10:16:15

1 your ultimate answer was that it would be safe or  
2 unsafe for transgender women to participate.

3 A No, the --

4 MR. FRAMPTON: Objection.

5 I'm sorry, let me do my objection. 10:16:31

6 Objection.

7 Answer his question.

8 THE WITNESS: No, to the best of my  
9 knowledge, my compensation was not tied to the  
10 determination of literature review around this 10:16:39  
11 subject.

12 BY MR. BLOCK:

13 Q So when you did a literature review, are you  
14 confident that you searched for everything that  
15 would support or oppose the position you're 10:17:00  
16 advocating for in your report?

17 MR. FRAMPTON: Objection; form and scope.

18 THE WITNESS: I'm confident that available  
19 literature, pro and con, was accessed and reviewed.

20 BY MR. BLOCK: 10:17:18

21 Q And are you confident that your report  
22 adequately discusses the available literature, pro  
23 and con?

24 A Again --

25 MR. FRAMPTON: Objection; form and scope. 10:17:29



1 Go ahead.

2 THE WITNESS: -- the -- the white paper is  
3 not a comprehensive literature review on the  
4 subject. It is an assessment of how the literature  
5 speaks to the issue of sports safety, particularly. 10:17:38  
6 I included what I thought was relevant to that  
7 discussion.

8 BY MR. BLOCK:

9 Q So -- but in -- in your -- in deciding what  
10 to include in your white paper, understanding that 10:17:55  
11 you can find it specifically to the topic of safety,  
12 did you include in the white paper everything  
13 that -- you know, pro and con to your argument, or  
14 did you just quote things that -- that you thought  
15 supported your contention that it would be unsafe 10:18:17  
16 for transgender women to participate?

17 MR. FRAMPTON: Objection; form, scope.

18 THE WITNESS: Well, obviously I can't speak  
19 to how successful I was at -- while the final  
20 reflects that, but I believe that it was fair 10:18:40  
21 consideration given to what ought to go into that  
22 paper and that the appropriate relevant things that  
23 needed to be in there were in there.

24 BY MR. BLOCK:

25 Q Did you view the purpose of the white paper 10:18:58

1 to provide an overview of -- overview of both sides  
2 of the argument, or did you view the purpose of the  
3 white paper to be, you know, making a specific  
4 argument that it was unsafe and -- and just  
5 providing, you know, citations to materials that 10:19:17  
6 supported that argument?

7 MR. FRAMPTON: Objection; form and scope.  
8 Go ahead.

9 THE WITNESS: I wouldn't say that the point  
10 of the argument was to argue -- or the paper was to 10:19:27  
11 argue that it was unsafe. It was to -- it was to  
12 lay out the evidence that says whether it was safe  
13 or not and what -- and lay out the thought process  
14 that would go into making that determination.

15 BY MR. BLOCK: 10:19:56

16 Q If you could go to --

17 A I think the underpinning of the whole thing  
18 is my background as a physician and just the thought  
19 processes that go into the practice of medicine on a  
20 daily basis when you're looking at injury risk and 10:20:19  
21 what -- what sorts of things factor into that. So  
22 that -- that underpins the paper before we even  
23 start.

24 Q And before starting on the paper, did you  
25 have any experience in working with sports injuries 10:20:31

1 related to the participation of transgender people?

2 MR. FRAMPTON: Objection; form and scope.

3 Go ahead.

4 THE WITNESS: Possibly. I -- I see men and  
5 women, boys and girls, every day in the office. I 10:20:53  
6 don't make a habit of asking them what their gender  
7 identity is. I take care of them all as well as I  
8 possibly can.

9 BY MR. BLOCK:

10 Q To the best of your knowledge, did you ever 10:21:03  
11 treat a sports injury for a transgender patient?

12 A Again, I don't make a habit of asking that  
13 question of my patients. So whether I've seen a  
14 transgender individual or not, I couldn't speak to  
15 that. 10:21:22

16 Q So you -- you have no idea one way or another  
17 whether you've treated a transgender patient?

18 MR. TRYON: Objection.

19 MR. FRAMPTON: Same objection; form and  
20 scope. 10:21:30

21 Go ahead.

22 THE WITNESS: I -- I may have seen and  
23 treated one or I -- I may not have. I don't ask  
24 that question of people. And I see men and women,  
25 boys and girls, in the office every day. 10:21:38

Page 66

1 BY MR. BLOCK:

2 Q Well, so, I guess, if a -- if a  
3 transgender -- if you saw a transgender patient, you  
4 wouldn't be able to tell from their physiology what  
5 their -- what their, as you say, biological sex is? 10:22:00

6 MR. TRYON: Objection.

7 MR. FRAMPTON: Objection; form.

8 Go ahead.

9 THE WITNESS: What do you mean by  
10 physiological form? 10:22:13

11 BY MR. BLOCK:

12 Q Let's say your -- a transgender -- let's say  
13 a woman comes into your office with a -- you know, a  
14 knee injury. Would -- by inspecting their knee,  
15 would you be able to tell whether or not this was a 10:22:36  
16 cisgender woman or a transgender woman?

17 MR. FRAMPTON: Objection; form and scope.

18 Go ahead.

19 THE WITNESS: Not necessarily, no.

20 BY MR. BLOCK: 10:22:44

21 Q Why not?

22 A A knee doesn't have sex-identifying  
23 characteristics to it.

24 Q You wouldn't be able to tell from muscle mass  
25 on the -- the patient's, you know, legs whether or 10:23:00

Page 67

1 not that patient was a transgender woman or a  
2 cisgender woman?

3 MR. FRAMPTON: Objection; form.

4 THE WITNESS: I'm not sure where you're going  
5 with this. I'm not sure I understand the question. 10:23:17

6 BY MR. BLOCK:

7 Q Well -- well -- well, these -- so you've  
8 talked, in your paper, about physiological  
9 differences between people with male sex assigned at  
10 birth and female sex assigned at birth and about, 10:23:35  
11 you know, how -- you know, how stark those  
12 differences are and that they're not affected by  
13 hormone therapy, and so I guess my question is, in  
14 light of that, I find it a little surprising that --  
15 that you would then say that you could examine or 10:23:49  
16 treat a sports injury and not know whether the  
17 person you're treating had a female sex assigned at  
18 birth or a male sex assigned at birth. So that's  
19 the context for my question.

20 A Well, I think the -- the initial -- 10:24:05

21 MR. FRAMPTON: Hold on.

22 Objection to the form.

23 MR. TRYON: Objection.

24 MR. FRAMPTON: Go ahead.

25 THE WITNESS: The initial question was 10:24:10

1       whether I had ever treated transgender individuals,  
2       and what I told you was that I try to view my  
3       patients as the individual in front of me. I don't  
4       routinely ask them what their gender identity is.

5               If you're asking me if anecdotally I could       10:24:26  
6       identify a, to use your language, trans woman if I  
7       was doing a knee exam, I suppose I could, but I  
8       can't speak to that, and it's far afield of why I  
9       was retained in this case.

10       BY MR. BLOCK:   10:24:47

11       Q     So -- but to the best of your knowledge, you  
12       don't know one way or another whether or not you've  
13       ever treated a transgender patient?

14       MR. FRAMPTON:   Objection; form.

15       Go ahead.   10:24:56

16       THE WITNESS:   To the best of my knowledge, I  
17       don't know whether I've treated a transgender  
18       patient, no.

19       BY MR. BLOCK:

20       Q     Did you have any interactions with ADF before   10:25:03  
21       you were first contacted as potentially being  
22       retained as an expert?

23       A     No.

24       Q     Have you provided any testimony in support of  
25       any legislation related to transgender people?       10:25:16

1 A No.

2 Q Have you provided any testimony in support of  
3 legislation similar to the legislation challenged in  
4 this case?

5 A What are you asking? 10:25:39

6 Q Well, yeah, I -- I -- I'm just trying to make  
7 sure I cover all the bases of my question.

8 And so I've -- I've -- it has been argued in  
9 this case that the statute at issue here, H.B. 3293,  
10 is not about transgender people, and so I -- I 10:26:10  
11 didn't want you to answer my question based on a  
12 similar type of distinction.

13 So -- so my question is, did you ever testify  
14 in support of any legislation that would have the  
15 affect of precluding transgender people from 10:26:25  
16 participating on sports teams consistent with their  
17 sex assigned -- with their gender identity?

18 MR. FRAMPTON: Objection to the form.

19 Go ahead.

20 THE WITNESS: I don't believe that I have 10:26:38  
21 ever provided testimony to any legislative  
22 committee, pending -- or pending legislation around  
23 issues similar to what we're talking about today.

24 BY MR. BLOCK:

25 Q Thank you. 10:26:59

1 MR. BLOCK: I -- I'm okay continuing, but do  
2 you need a break?

3 MR. FRAMPTON: We're at about an hour and a  
4 half. It's -- it's up to you, if you want five  
5 minutes or if you want to go for another half hour 10:27:13  
6 or whatever.

7 THE WITNESS: Is this a good break point for  
8 you, or do you --

9 MR. BLOCK: Either way. I can break in half  
10 an hour or I can keep going. 10:27:24

11 THE WITNESS: I can use the restroom.

12 MR. BLOCK: Okay. So --

13 MR. FRAMPTON: Then let's do five minutes.

14 MR. BLOCK: Great. See you in five.

15 MR. FRAMPTON: All right. Thank -- 10:27:33

16 THE VIDEOGRAPHER: We're off -- off the  
17 record at 10:27 a.m.

18 (Recess.)

19 THE VIDEOGRAPHER: We are on the record at  
20 10:34 a.m. 10:34:34

21 BY MR. BLOCK:

22 Q Good morning again. I just have some  
23 questions about your -- your training as related to  
24 transgender people.

25 To the best of your recollection, as part of 10:34:49

Page 71



1 your formal education for your undergraduate degree,  
2 did you ever take any courses regarding transgender  
3 people?

4 MR. FRAMPTON: Objection; form.

5 Go ahead.

10:35:03

6 THE WITNESS: To the best of my recollection,  
7 I never took a course in trans- -- affecting -- or  
8 reflecting transgender people in undergraduate, no.

9 BY MR. BLOCK:

10 Q And did you ever conduct any research  
11 concerning transgender people as an undergrad?

10:35:12

12 MR. FRAMPTON: Object to the form.

13 Go ahead.

14 THE WITNESS: No, I never conducted research  
15 as an undergraduate on transgender people.

10:35:25

16 BY MR. BLOCK:

17 Q And then as part of your formal education for  
18 your M.D., did you ever take any courses regarding  
19 transgender people?

20 MR. FRAMPTON: Object to the form.

10:35:37

21 THE WITNESS: No. There were no courses on  
22 transgender people offered during my training in  
23 medical school.

24 BY MR. BLOCK:

25 Q And did you -- did you ever conduct any

10:35:45

Page 72

1 research concerning transgender people in medical  
2 school?

3 MR. FRAMPTON: Object to the form.

4 THE WITNESS: No, I never conducted research  
5 on transgender people in medical school. 10:35:51

6 BY MR. BLOCK:

7 Q Okay. And in -- in your residency, did you  
8 receive any training related to transgender people?

9 MR. FRAMPTON: Object to the form.

10 Go ahead. 10:36:04

11 THE WITNESS: I can't recall offhand if there  
12 were lectures on that subject during the time that I  
13 was there.

14 To the best of my recollection, the answer to  
15 that is no. 10:36:18

16 BY MR. BLOCK:

17 Q And in your fellowship, did you receive any  
18 training related to transgender people?

19 MR. FRAMPTON: Same objection.

20 THE WITNESS: Again, to the best of my 10:36:30  
21 recollection, I do not recall specific training on  
22 the transgender athlete during my fellowship.

23 BY MR. BLOCK:

24 Q So you're not -- you're not an expert in the  
25 treatment of transgender people; correct? 10:36:47

Page 73

1 MR. FRAMPTON: Object to the form, scope.

2 Go ahead.

3 THE WITNESS: As I said, I'm a  
4 board-certified sports medicine physician. I've  
5 been retained in this case to offer an opinion on 10:36:58  
6 sports safety. I'm not a board-certified  
7 endocrinologist.

8 BY MR. BLOCK:

9 Q Okay. So I -- I just asked -- I need to  
10 define the scope of the opinions you're offering. 10:37:08

11 So you're not -- you -- you are not an expert  
12 in the treatment of transgender people; correct?

13 MR. FRAMPTON: Object to the form.

14 THE WITNESS: I do not treat transgender --  
15 I -- I do not have training in the treatment of 10:37:22  
16 transgender people. I am not a board-certified  
17 endocrinologist.

18 BY MR. BLOCK:

19 Q And -- and you are not an expert in the  
20 treatment of transgender people; correct? 10:37:31

21 A Define --

22 MR. FRAMPTON: Sam objection.

23 THE WITNESS: Define "treatment" for me.

24 BY MR. BLOCK:

25 Q Medical care for transgender people. 10:37:47

Page 74

1 MR. FRAMPTON: Same objection to the form.

2 Go ahead.

3 THE WITNESS: I would be considered an expert

4 for the sports medicine care of an injured athlete

5 who happens to be transgender.

10:38:03

6 BY MR. BLOCK:

7 Q Okay. So --

8 A I'm not an -- I am not a board-certified

9 endocrinologist. So if your speaking to hormonal

10 manipulation, then no.

10:38:12

11 Q And you're not -- you're not an expert in

12 mental healthcare for transgender people; correct?

13 MR. FRAMPTON: Object to the form.

14 Go ahead.

15 THE WITNESS: Well, in the context of the

10:38:24

16 work that we do with patients every day, we have to

17 take into consideration mental health, so it touches

18 on what I do every day.

19 BY MR. BLOCK:

20 Q How so?

10:38:46

21 A The -- I treat the person in front of me and

22 whatever they're bringing into the room.

23 Q So you're -- you're not an expert in the

24 treatment of gender dysphoria, in particular, are

25 you?

10:39:07

Page 75

1 A Define "gender dysphoria."

2 Q It's the medical condition recognized in the  
3 DSM-V.

4 Do you -- do you know what the DSM-V is?

5 A I'm familiar with it, yes. 10:39:21

6 Q Okay. So are -- are -- are you a -- an  
7 expert in mental healthcare for treating the  
8 condition of gender dysphoria as defined in the  
9 DSM-V?

10 A I am a board-certified sports physician who 10:39:34  
11 has been retained to provide information on safety  
12 in athletes, some of whom may be transgender.

13 Q Okay. But you are not -- you have not been  
14 retained to provide an expert opinion on the  
15 treatment of gender dysphoria; correct? 10:39:53

16 A Correct.

17 Q Okay. If we go down to -- if you would look  
18 at Exhibit 80, please. That's your expert report.

19 A Exhibit 80, you said?

20 Q Yeah. 10:40:36

21 A Okay.

22 Q And if you go to your abbreviated CV, which  
23 is, you know, the last three pages.

24 A Okay.

25 Q And if you go to -- it's the paginated page 10:40:55

1 73 at the bottom. There's a section of your CV that  
2 says "Special Qualifications."

3 Do you see that?

4 A I do.

5 Q Okay. I just have a couple of questions 10:41:06  
6 about -- about this.

7 The -- the first entry under "Special  
8 Qualifications" is "Prior legal consulting work in  
9 cases with both local and national reach."

10 Do you see that? 10:41:21

11 A Yes.

12 Q Okay. What are the cases with national reach  
13 that you're referring to?

14 A This one.

15 Q Any others? 10:41:48

16 A The -- as I said, I've been retained in the  
17 Florida case.

18 Q Okay. So further down, it says -- this is  
19 about, like, the seventh bullet point -- it says (as  
20 read): 10:41:56

21 "Extensive experience speaking to  
22 large national groups on issues  
23 pertaining to sports medicine,  
24 including but not limited to:"

25 And then there's a list of things. 10:42:06

Page 77

1 Do you -- do any of the topics you've spoken  
2 on include anything about transgender people?

3 A No, I have never --

4 MR. FRAMPTON: Objection to form.

5 Go ahead.

10:42:21

6 THE WITNESS: In my role as a sports  
7 physician, I have not spoken on the topic of  
8 transgenderism in sports.

9 BY MR. BLOCK:

10 Q In -- in any other role, have you spoken on 10:42:28  
11 the topic of transgendered people in sports?

12 A No.

13 Q Now, the -- the second to last sub-bullet  
14 point of the things you've spoken of says "Advocacy  
15 in Sports Medicine." 10:42:44

16 Do you see that?

17 A Yes, I do.

18 Q When you give speeches on the topic of  
19 advocacy in sports medicine, what do you talk about?

20 A So prior to being on executive, I was -- I 10:42:55  
21 served two terms on the AMSSM's board of directors,  
22 and I became noted as somebody who was involved in  
23 public policy. And I guess I'd define that by  
24 advocating for sports medicine issues in the -- in  
25 the public sphere. 10:43:22

Page 78

1           So during the time that I was on executive,  
2       we interviewed and hired our first lobbyist. We  
3       developed a state by state network of physician  
4       members who would inform us of legislative issues  
5       going on around the United States. We were involved 10:43:43  
6       in some creation of legislation. That's -- that's  
7       the sort of advocacy that I'm talking about.

8           So -- so the advocacy would be teaching other  
9       physicians how to advocate for sports medicine  
10      issues in the legislative arena. 10:44:08

11      Q     So what's an example of advocating for sports  
12      medicine issues?

13      A     I helped Tom Latham write a bill that  
14      would -- that clarified legal questions about  
15      physicians who took care of teams across state lines 10:44:37  
16      and didn't have licensure in the state that they  
17      were traveling into, and that bill passed the  
18      U.S. Congress and was signed by President Trump.

19      Q     Does AMSSM have any official position on the  
20      participation of transgender athletes in sports? 10:45:04

21      A     I don't believe they do.

22      Q     Does AMSSM issue official positions on -- on  
23      topics?

24      A     Occasionally, yes.

25      Q     Do you know whether AMSSM ever had any 10:45:25



1 discussions or debates about whether to form an  
2 official position on the topic of transgender  
3 athletes participating in sports?

4 A To the best of my recollection, not that  
5 specifically, no. 10:45:40

6 Q Anything -- to the best of your knowledge,  
7 has AMSSM taken -- had any discussions about taking  
8 an official position in any other topic related to  
9 transgender people?

10 MR. FRAMPTON: Objection to the form. 10:45:57

11 Go ahead.

12 THE WITNESS: There was a position statement  
13 several years ago on mental health issues in  
14 athletes, and I can't recall offhand whether the  
15 transgender athlete was referenced to in that paper, 10:46:14  
16 but I think it was, possibly. I'm not sure.

17 BY MR. BLOCK:

18 Q And were you involved in those discussions at  
19 all?

20 A No. I was on executive at the time, so 10:46:27  
21 drafts of those always came across for us to review,  
22 but I don't recall the specifics of that paper.

23 Q Going back to the -- the 2021 AMSSM  
24 conference, why is it that you didn't have any  
25 involvement in planning for the sessions related to 10:46:56

Page 80

1 transgender medicine?

2 MR. FRAMPTON: Objection to the form.

3 Go ahead.

4 THE WITNESS: Because the -- the format on

5 executive is that you're elected to a four-year 10:47:12

6 term. And your first year, you're the second vice

7 president. Your second year, you're the first vice

8 president. Your third year, you're the president.

9 The fourth year, you're the immediate past

10 president. All four years, you're a voting member 10:47:25

11 of executive. The second vice president is

12 responsible for planning an upcoming annual meeting.

13 So those conversations that I was telling you

14 about occurred at the time that I was second vice

15 president and working on formulating what would be 10:47:46

16 the Houston meeting.

17 BY MR. BLOCK:

18 Q And so other -- so you didn't have

19 discussions about the meetings other than that year

20 when you were the second vice president, is that 10:48:05

21 what you said?

22 MR. FRAMPTON: Objection to form.

23 THE WITNESS: My responsibility was for the

24 2019 annual meeting.

25 ///

1 BY MR. BLOCK:

2 Q Okay. And so you weren't involved in  
3 discussions for planning for the 2021 meeting?

4 MR. FRAMPTON: Same objection.

5 Go ahead. 10:48:23

6 THE WITNESS: No, I was not.

7 BY MR. BLOCK:

8 Q Okay. So the 2021 -- actually, let me just  
9 introduce another exhibit. Actually, I'll do it  
10 later. 10:49:00

11 Let's go to your -- Exhibit 81, which is your  
12 June 22nd, 2021, report and white paper.

13 A Did you say 81?

14 Q Yes. It's the document that says "Exhibit G"  
15 at the top, and then it is your declaration from 10:49:23  
16 June 22nd, 2021.

17 A Okay.

18 Q Do you have that in front of you?

19 A I do.

20 Q Okay. So in this June 2021 white paper, do 10:49:33  
21 you express any opinions about whether prepubertal  
22 boys have an athletic advantage over prepubertal  
23 girls?

24 A I don't want to overstate. I can't recall  
25 offhand, but I -- I don't think the focus of that 10:49:49

Page 82

1 paper included prepubertal girls or boys.

2 Q Were they discussed at all?

3 A I can't recall.

4 Q If you can turn to, you know, page 7, just  
5 referring to the -- the document's pagination, not 10:50:11  
6 the -- not the PDF pagination, in -- in -- at the  
7 very top of page 7. Let me know when you get there.

8 A Okay. I'm there.

9 Q Okay. So there's sub -- subparagraph D.  
10 Do you see that? 10:50:32

11 A Yes.

12 Q Okay. Subparagraph D says (as read):  
13 "Current research supports the  
14 conclusion that suppression of  
15 testosterone levels by males who 10:50:40  
16 have already begun puberty will not  
17 fully reverse the effects of  
18 testosterone on skeletal size,  
19 strength, or muscle hypertrophy,  
20 leading to persistence of sex-based 10:50:53  
21 differences in power, speed, and  
22 force generating capacity."

23 Did I read that right?

24 A It's "hypertrophy," but yes.

25 Q All right. Good. My second question would 10:51:02

1 be did I pronounce that word right.

2 A Close.

3 Q "Hypertrophy"?

4 A "Hypertrophy."

5 Q Okay. Does that -- in this paragraph, do you 10:51:11  
6 say anything about athletes before puberty?

7 A That paragraph references males who have  
8 already begun puberty.

9 Q And there's no reference there to males  
10 before puberty, is there? 10:51:32

11 A No.

12 Q Okay.

13 A There is not.

14 Q And now if we go to paragraph -- if we go to  
15 page 18 -- I'm sorry -- paragraph 18, page 11, of 10:51:48  
16 the same document.

17 A Same pagination?

18 Q Yeah. So -- yeah. So paragraph 18. That's  
19 the paragraph that begins with "External risk  
20 factors." 10:52:08

21 A Yes, I see.

22 Q And if you go five lines from the bottom,  
23 there's a sentence that begins with "To the latter  
24 point."

25 A Uh-huh. 10:52:16

1 Q Okay. It says (as read):

2 "To the latter point, children don't  
3 play contact sports with adults and,  
4 as has already been discussed, after  
5 the onset of puberty, men and women  
6 compete in categories specific to  
7 their own biological sex."

10:52:24

8 Do you see that?

9 A Yes, I do.

10 Q And I've read that correctly?

10:52:32

11 A You did.

12 Q Okay. And so this sentence also refers to  
13 men and women competing in -- I'll say this again.

14 You don't discuss anything about people  
15 before puberty in this sentence, do you?

10:52:49

16 MR. FRAMPTON: Objection to the form.

17 Go ahead.

18 THE WITNESS: No, I don't.

19 BY MR. BLOCK:

20 Q Okay. Why did you say "after the onset of  
21 puberty, men and women compete in categories  
22 specific to their own biological sex"?

10:52:57

23 A Well, that was probably overstated. It --  
24 those categories clearly exist prior to puberty as  
25 well.

10:53:23

1 Q Why -- why did you include the words "after  
2 the onset of puberty"?

3 MR. FRAMPTON: Objection to the form.

4 Go ahead.

5 THE WITNESS: I believe because the divisions 10:53:30  
6 are consistent -- are most consistent after puberty.

7 BY MR. BLOCK:

8 Q And every line of this paper is your own  
9 words and thought, right?

10 A Correct. 10:53:57

11 Q Okay. And so you thought it was relevant to  
12 include the words "after the onset of puberty" in  
13 this sentence; correct?

14 MR. FRAMPTON: Objection; form.

15 Go ahead. 10:54:07

16 THE WITNESS: Yes. For example,  
17 six-year-olds will often play soccer together, boys  
18 and girls.

19 BY MR. BLOCK:

20 Q And do you think that that is a threat to the 10:54:21  
21 safety of the girls?

22 MR. FRAMPTON: Objection to the form.

23 THE WITNESS: I didn't say that.

24 BY MR. BLOCK:

25 Q Well, I'm -- I'm asking you. 10:54:31

1           Is -- are six -- when six-year-old boys and  
2           six-year-old girls play soccer together, is that a  
3           threat to the safety of those six-year-old girls?

4           MR. FRAMPTON: Same objection.

5           Go ahead. 10:54:45

6           THE WITNESS: Generally, when six-year-olds  
7           play soccer together, there is not high risk to --

8           BY MR. BLOCK:

9           Q    I'm sorry, I -- I didn't hear the end of your  
10           sentence. 10:55:06

11           A    I said --

12           MR. FRAMPTON: Well, let me -- objection to  
13           the form.

14           Go ahead and answer the question.

15           THE WITNESS: Six-year-olds play soccer 10:55:15  
16           together. Their risks are -- the risk of injury, as  
17           a group, is less.

18           BY MR. BLOCK:

19           Q    Do you think the -- the risk is increased  
20           when boys play? 10:55:33

21           A    To the extent that boys are faster than  
22           girls, there could be increased risk. The overall  
23           speed and mass of six-year-olds is such that the  
24           absolute risks are minuscule.

25           Q    Okay. Are you providing an expert opinion 10:56:04



1 today on the safety implications of allowing  
2 prepubertal boys and prepubertal girls to play  
3 sports together on the same team?

4 MR. FRAMPTON: Objection to the form.

5 Go ahead.

10:56:25

6 THE WITNESS: I'm providing an opinion on the  
7 safety issues of boys and girls playing together on  
8 the same team, including prepube- -- the prepube- --  
9 the prepubertal population.

10 BY MR. BLOCK:

10:56:44

11 Q So -- so you are -- you are also offering  
12 testimony today on the safety of prepubertal boys  
13 and prepubertal girls playing on the same team?

14 A I'm offering an opinion on safety as it --  
15 when -- particularly when boys cross over into  
16 girls' sports, play on teams that are designated as  
17 girls' teams, and those -- and the issues there have  
18 to do with retained differences.

10:57:02

19 Q Okay. So just focusing on prepubertal  
20 population -- okay, so nothing about after puberty,  
21 just focusing on prepubertal population -- are --  
22 you are offering testimony that it -- there are  
23 safety risks of -- well, I'll take that back.

10:57:38

24 Just focusing on the prepubertal population,  
25 are you offering testimony that it is not safe for

10:57:51

1 prepubertal boys to play on -- on teams designated  
2 for prepubertal girls?

3 MR. FRAMPTON: Objection to the form.

4 THE WITNESS: I believe that there is a  
5 safety risk when -- that there can be a safety risk 10:58:06  
6 when prepubertal boys cross over and play onto  
7 girls' teams, yes.

8 BY MR. BLOCK:

9 Q Is there a safety risk when prepubertal boys  
10 and prepubertal girls play on coed teams? 10:58:20

11 A Define a -- well, what coed team are you  
12 talking about?

13 Q Well, a team that --

14 A Talking about -- are you talking about  
15 recreational teams or competitive leagues? What are 10:58:33  
16 you talking about?

17 Q Do you -- do you see a distinction between  
18 the two?

19 A Yes, I do.

20 Q Okay. So do you think -- are you testifying 10:58:47  
21 that there's a safety risk when prepubertal boys and  
22 prepubertal girls play on coed recreational teams?

23 MR. FRAMPTON: Objection to the form.

24 THE WITNESS: So recreational teams are  
25 unique in that they're primarily designed for 10:59:02

1       enjoyment. They're not primarily stratified for  
2       purpose of competition. So oftentimes the rules in  
3       these leagues are altered to promote safety.

4               MR. BLOCK: So can you --

5               Can the court reporter read back my question?       10:59:23

6               THE REPORTER: Yes.

7               (Record read.)

8               MR. FRAMPTON: Objection to the form.

9               Go ahead.

10              THE WITNESS: There -- there could be safety       10:59:53  
11       risks with coed participation, yes.

12       BY MR. BLOCK:

13              Q    On recreational teams?

14              A    It depends on how the sport is structured,  
15       but yes.   11:00:03

16              Q    So you're comfortable saying when  
17       six-year-olds play soccer together, the safety risks  
18       are minuscule. Is that true when seven-year-olds  
19       play -- prepubertal boys and girls play soccer  
20       together?   11:00:19

21              MR. FRAMPTON: Object to the form.

22              Go ahead.

23              THE WITNESS: I couldn't speak to that.

24       BY MR. BLOCK:

25              Q    But you can speak to six-year-olds?               11:00:26

1 MR. FRAMPTON: Same objection.

2 THE WITNESS: I have.

3 I thought I answered that question.

4 BY MR. BLOCK:

5 Q Why -- why can you speak to the safety 11:00:35  
6 implications of six-year-olds, but not  
7 seven-year-olds?

8 MR. FRAMPTON: Object to the form.

9 Go ahead.

10 THE WITNESS: As boys age, they develop skill 11:00:52  
11 sets, and those evolve year to year.

12 BY MR. BLOCK:

13 Q So --

14 A I -- I cannot speak to a peer-reviewed study  
15 that designates age six from age seven, no. 11:01:05

16 Q So the difference between, you know, six and  
17 seven or, you know, six and eight is that the boys  
18 are developing skill sets that they didn't have when  
19 they were younger?

20 A In part. 11:01:23

21 MR. FRAMPTON: Objection to the form.

22 BY MR. BLOCK:

23 Q Can you repeat your answer?

24 MR. FRAMPTON: Yeah, my objection is noted.

25 Go ahead and repeat your answer. 11:01:32

Page 91

1 THE WITNESS: In part.

2 BY MR. BLOCK:

3 Q Why -- what's the other part?

4 A Well, there are retained -- there are  
5 biological differences from the beginning, and then 11:01:43  
6 those biological differences start to combine with  
7 additional distincters that begin to lead to  
8 additive risk.

9 Q All right. But -- but those additional  
10 distincters are a result of them acquiring 11:02:09  
11 additional skills?

12 MR. FRAMPTON: Same objection.

13 Go ahead.

14 THE WITNESS: Well, define "skills." If by  
15 "skills" you mean they're becoming faster, they're 11:02:23  
16 starting to become stronger, then yes.

17 BY MR. BLOCK:

18 Q Well, you know, I'm trying to -- what did you  
19 mean when you said develop additional skills a  
20 couple of questions ago? 11:02:42

21 A Well, if you look at data on youth, in  
22 elementary-aged youth, there's several studies out  
23 there looking at population data, and they -- they  
24 come to pretty consistent findings, which is that  
25 boys outperform girls in measures of strength and 11:03:04

Page 92

1 speed and girls are generally more flexible. And  
2 the findings --

3 Q Why --

4 A -- are pretty consistent from region to  
5 region and from investigator to investigator. 11:03:13

6 Q And why didn't you include a discussion of  
7 that in -- in this June 2021 paper?

8 A I referenced Dr. Brown's paper, and he goes  
9 through that fairly extensively.

10 Q Well, do you reference Dr. Brown in this 11:03:29  
11 June 2021 paper?

12 A No.

13 Q Okay. So why didn't you discuss prepubertal  
14 boys and girls in this June 2021 paper?

15 MR. FRAMPTON: Object to the form. 11:03:46  
16 Go ahead.

17 THE WITNESS: That wasn't the focus of -- of  
18 the paper. The focus of that paper was primarily  
19 the effect of testosterone on athletic development.

20 BY MR. BLOCK: 11:04:07

21 Q Why did you make that the focus of your  
22 June 2021 paper?

23 MR. FRAMPTON: Object to the form.

24 THE WITNESS: I don't recall offhand what  
25 specifically went into that decision. 11:04:26

1 BY MR. BLOCK:

2 Q Can you recall what generally went into that  
3 decision?

4 MR. FRAMPTON: Same objection.

5 THE WITNESS: I would say the same thing. 11:04:37

6 BY MR. BLOCK:

7 Q So you -- you don't know why you decided to  
8 focus on testosterone, you know, beginning with the  
9 onset of puberty for your June 2021 paper?

10 MR. TRYON: Objection. 11:04:53

11 MR. FRAMPTON: Same objection.

12 THE WITNESS: I -- I -- I can't recall  
13 specifically why I excluded the prepubertal  
14 population from that -- that paper.

15 BY MR. BLOCK: 11:05:03

16 Q If we go to page -- to paragraph 40, on  
17 page 21 of the same document.

18 THE WITNESS: Let me know when you're there.

19 MR. FRAMPTON: Sorry, Josh, you said page 40?

20 MR. BLOCK: Paragraph 40, page -- 11:05:28

21 MR. FRAMPTON: Paragraph 40. Thank you. I'm  
22 so sorry.

23 THE WITNESS: I think he did say page 40.

24 Hold on.

25 Okay. 11:05:44

1 BY MR. BLOCK:

2 Q If you go -- one, two, three, four, five --  
3 seven -- seven or eight lines down, there's a  
4 sentence that begins with "All of us."

5 A Okay. 11:05:59

6 Q That sentence says (as read):

7 "All of us are familiar with basic  
8 objective physiological differences  
9 between the sexes which become

10 apparent after the onset of puberty, 11:06:06  
11 and persist throughout adulthood."

12 Did I read that right?

13 A You did.

14 Q And this sentence, again, is talking about  
15 things that happen after the onset of puberty; 11:06:18  
16 correct?

17 A Correct.

18 Q And there's nothing in this sentence  
19 referring to prepubertal kids; correct?

20 A That wasn't the focus of this paper, so yes. 11:06:29

21 Q Okay. Now let's actually go to page 40,  
22 paragraph 79. Let me know when you're there.

23 A I'm there.

24 Q So after -- in the middle of the paragraph,  
25 after the parenthetical, that cites to Hilton, 11:06:59

Page 95



1 DeVarona, and Harper, there's a sentence that begins  
2 with "As a medical doctor."

3 Do you see that?

4 A I do.

5 Q Okay. So the -- it says (as read): 11:07:08

6 "As a medical doctor, I will focus  
7 on those" --

8 I'll read this again, sorry. (As read):

9 "As a medical doctor, I will focus  
10 on those specific sex-based 11:07:15

11 characteristics of males who have

12 undergone normal sex-determined

13 pubertal skeletal growth and

14 maturation that are relevant to the

15 safety of female athletes." 11:07:27

16 Did I read that right?

17 A Yes.

18 Q Okay. And so -- so this June 2021 paper is  
19 focusing on sex-based characteristics of males who  
20 have undergone normal sex-determined prepubertal 11:07:50  
21 skeletal growth and maturation?

22 A Correct.

23 Q Why did you focus on people who have  
24 undergone normal sex-determined prepubertal skeletal  
25 growth and maturation? 11:08:03

1 A Well, I --

2 MR. FRAMPTON: Objection to form.

3 Go ahead.

4 THE WITNESS: I thought you asked me that  
5 already, and I thought I answered that I -- I can't 11:08:14  
6 recall what the reason was for specifically focusing  
7 on adolescent, postadolescent, over prepubertal.

8 BY MR. BLOCK:

9 Q You don't -- do you have -- you didn't have  
10 any background, medical training, that would, you 11:08:24  
11 know, provide you information on why focusing on  
12 changes that occur during puberty would be  
13 important?

14 MR. TRYON: Objection.

15 MR. FRAMPTON: Objection to the form. 11:08:40

16 THE WITNESS: I already answered that  
17 question. I think my last answer was best -- or my  
18 first answer was best, but if you want me to answer  
19 again, I will tell you again that I don't remember  
20 why postadolescent or prepubertal -- or the pubertal 11:09:00  
21 phase was focused on exclusively.

22 BY MR. BLOCK:

23 Q All right. Now let's turn to your expert  
24 report dated February 23rd, 2022. So that's  
25 Exhibit 80. 11:09:42

1 A Okay. I've got it.

2 Q So if you go to paragraph -- so page 9,  
3 paragraph 11 C.

4 A Okay.

5 Q And in the middle of paragraph 11 C, the -- 11:10:07  
6 there's a sentence that begins with "Even before."

7 A Correct.

8 Q So there you say (as read):

9 "Even before puberty, males have a  
10 performance advantage over females 11:10:24  
11 in most athletic events."

12 Correct?

13 A That is correct.

14 Q And that sentence wasn't contained in your  
15 first version of your white paper from June 2021; 11:10:32  
16 right?

17 A As I said, that was not the focus of that  
18 paper, so that's correct.

19 Q Okay. Why did you decide to include it in  
20 this paper? 11:10:48

21 A When --

22 MR. FRAMPTON: Objection to the form.

23 Go ahead.

24 THE WITNESS: When I was retained by  
25 West Virginia in this case, discussions between 11:11:04

Page 98

1 attorneys at ADF and attorneys at West Virginia --

2 MR. TRYON: I just want to insert here,

3 please don't -- again, this is attorney-client --

4 don't get into attorney-client protected

5 information. So discussions with counsel are 11:11:26

6 protected.

7 MR. FRAMPTON: Right.

8 MR. TRYON: But to the extent that you can

9 answer that without disclosing that -- those

10 communications, you may do so. 11:11:32

11 MR. FRAMPTON: Yeah, same -- same

12 instruction.

13 THE WITNESS: Okay. So I -- I -- I guess

14 what I would say is that the initial report was

15 filed -- was created prior to being retained by the 11:11:42

16 State of West Virginia and the updated paper that

17 you have was updated to include the prepubertal

18 population because my understanding is that the

19 defendant in this case is -- is young.

20 BY MR. BLOCK: 11:12:14

21 Q Before you were asked to update the white

22 paper, did you have an expert opinion regarding the

23 safety implications of prepubertal boys and girls

24 playing together?

25 MR. FRAMPTON: Objection to the form. 11:12:26

1 THE WITNESS: Many of the considerations that  
2 exist in that first paper are relevant to the  
3 prepubertal group. I suspected that they would  
4 probably hold, and I do believe that they hold.

5 BY MR. BLOCK:

11:12:58

6 Q So -- so before you were asked to update your  
7 paper, you had an expert opinion that it would be  
8 unsafe for prepubertal girls and play -- and boys to  
9 play together?

10 MR. FRAMPTON: Objection to the form.

11:13:10

11 THE WITNESS: As I said, I suspected that  
12 there was probably risk in that population as well.

13 BY MR. BLOCK:

14 Q Now, you talked about the literature review  
15 you conducted for creating your white paper. What  
16 sort of literature review did you conduct for the  
17 process of updating the right -- the white paper to  
18 discuss prepubertal kids?

11:13:31

19 A I went more into the picture on population  
20 testing, looking at what differences in performance  
21 were between boys and girls. I looked at  
22 international and national performance records,  
23 databases. I looked at ratified standards for --  
24 that had been determined through, for instance, the  
25 presidential physical fitness test.

11:14:01

11:14:35

1 Q How did you identify what sources to look at?

2 A PubMed. I own -- well, PubMed.

3 Q Did you review any sources that were not  
4 included in Dr. Brown's 2022 expert report?

5 MR. FRAMPTON: Objection to the form. 11:15:06

6 THE WITNESS: I couldn't speak to that  
7 because I haven't cross-referenced his bibliography  
8 to mine.

9 BY MR. BLOCK:

10 Q In paragraph 16, page 12 of your report, 11:15:26  
11 could you turn to that?

12 A Yes, I'm there.

13 Q So -- so right before paragraph 17, the --  
14 the final sentence in paragraph 16, it says (as  
15 read): 11:15:53

16 "Although most easily documented in  
17 athletes who have gone through  
18 puberty, these differences are not  
19 exclusively limited to  
20 post-pubescent athletes either." 11:16:04

21 Did I read that right?

22 A You did.

23 Q Okay. And how -- can you explain to me how  
24 these differences are most easily documented in  
25 athletes who have gone through puberty? 11:16:17

Page 101

1 A Of course.

2 The differences between men and women with  
3 regards to strength and -- both upper and lower  
4 body -- and muscle mass and power increase,  
5 there's -- there's greater separation between the 11:16:48  
6 sexes after puberty has occurred. That doesn't mean  
7 that there's no difference prior.

8 Q But you -- you say it's most easily  
9 documented. What did you mean by "most easily  
10 documented"? 11:17:07

11 MR. FRAMPTON: Object to the form.

12 MR. BLOCK: I'm sorry, what's the -- what's  
13 the form objection to that?

14 MR. FRAMPTON: The objection is I -- I  
15 don't -- I don't think you've properly stated what 11:17:30  
16 he said.

17 BY MR. BLOCK:

18 Q What -- what did you mean when you said "most  
19 easily documented"?

20 A Meaning that the -- that wider differences 11:17:39  
21 are more apparent than narrow differences.

22 Q So paragraph 17 says (as read):

23 "I have reviewed the expert

24 declaration of Gregory A. Brown,

25 Ph.D., FACM of February 23, 2022, 11:17:58

1 provided in this case..."

2 Correct?

3 A Correct.

4 Q Okay. And the date of this document that

5 we're reading from is also February 23rd, 2022; 11:18:09

6 correct?

7 A Correct.

8 Q Okay. So how did you read Dr. Brown's expert

9 declaration dated the same day as your declaration?

10 A That was provided to me by attorneys at ADF. 11:18:31

11 Q Did you read Dr. Brown's declaration after it

12 had already been signed?

13 A I can't speak to when he signed that, so I

14 don't know the answer to that question.

15 Q Did you review Dr. Brown's declaration on 11:18:52

16 February 23rd, 2022?

17 A I don't recall when I reviewed it.

18 Q Now, the sentence continues -- I'll just read

19 it from the beginning again.

20 (As read): 11:19:15

21 "I have reviewed the expert

22 declaration of Gregory A. Brown,

23 Ph.D., FACM of February 23, 2022,

24 provided in this case, which

25 includes evidence from a wide 11:19:23

Page 103



1 variety of sources, including  
2 population-based mass testing data,  
3 as well as age-stratified  
4 competition results, all of which  
5 support the idea that prepubertal 11:19:35  
6 males run faster, jump higher and  
7 farther, exhibit higher aerobic  
8 power output, and have greater upper  
9 body strength (evidenced by stronger  
10 hand grip and better performance 11:19:45  
11 with chin-ups or bent arm hang) than  
12 comparably aged females."

13 Did I read that right?

14 A You did.

15 Q Okay. And then you go on to say that this is 11:19:55  
16 documented in Presidential Fitness Test, Euro  
17 Fitness Test and additional mass testing data from  
18 the UK and Australia; correct?

19 A Correct.

20 Q Now, are those fitness tests what you were 11:20:05  
21 referring to earlier when you were discussing  
22 additional research you had done to update your  
23 white paper?

24 A Yes.

25 Q Okay. Do you actually cite to those fitness 11:20:18

1 test results in the bibliography of this white  
2 paper?

3 A I don't believe that that's in there.

4 Q Okay. So does this refresh your recollection  
5 about whether you -- about how -- I'll take this -- 11:20:36  
6 I'll -- strike that. I'll ask again.

7 Do you -- did you become aware of these  
8 differences in test results from reading Dr. Brown's  
9 declaration?

10 A No. I had been familiar with some of those 11:20:55  
11 papers prior.

12 Q When did you become familiar with them?

13 A In the course of -- likely in the course of  
14 initial review, on -- on PubMed searches.

15 Q Can you turn to page 61 of the document? 11:21:24  
16 That's your bibliography.

17 A Okay.

18 Q Can you point out to me the sources in the  
19 bibliography addressing performance differences  
20 between -- or -- or differences in body composition 11:22:03  
21 between prepubertal girls and prepubertal boys?

22 A We're speaking to performance differences;  
23 correct?

24 Q Or physiological differences.

25 A Papers that I referenced are not in there. 11:23:25

1 Q Okay. Why not?

2 A I reviewed -- papers that I had reviewed  
3 beforehand were referenced within Dr. Brown's  
4 report.

5 Q On the -- if -- going back to paragraph 17, 11:24:26  
6 which is -- well, if you could go back to  
7 paragraph 17. So that's pages 12 and 13.

8 12 and 13. Hopefully, I said that correctly.

9 If you could go to the end of paragraph 17,  
10 which is on page 13. 11:24:51

11 A Okay.

12 Q Let me know when you're there.

13 A I'm there.

14 Q Okay. It says (as read):

15 In sum, a large and unbridgeable 11:25:01  
16 performance gap exists between  
17 the" -- "exists" --

18 Let me try that again. I need another cup of  
19 coffee.

20 It says (as read): 11:25:11

21 "In sum, a large and unbridgeable  
22 performance gap between the sexes is  
23 well-studied and equally  
24 well-documented, beginning in many  
25 cases before puberty." 11:25:20

1 Do you see that sentence?

2 A I do.

3 Q Okay. Is -- do you believe that the  
4 performance gap before puberty is unbridgeable?

5 A No, that's not what I said. 11:25:37

6 Q That's why I'm asking the question.

7 A No.

8 Q Do -- do you --

9 A What -- what it says is large and  
10 unbridgeable performance gap between the sexes is 11:25:46  
11 well-studied beginning in many cases before puberty.

12 Q Okay. In -- in many cases, is there an  
13 unbridgeable performance gap before puberty?

14 A I believe, based on the -- I believe if you  
15 look at the -- of how sex-based records break down, 11:26:14  
16 that we're talking about upper-end performance that  
17 it reflects, in -- as I said, in many cases, an  
18 unbridgeable gap.

19 Q How about average differences between boys  
20 and girls before puberty, is the gap so large to be 11:26:44  
21 unbridgeable?

22 A Not in all cases, no.

23 Q In which case is -- is it large enough to be  
24 unbreakable?

25 A Well, for example, boys can outperform girls 11:27:02

1 as early as age seven and ups at between 100 and  
2 1200 percent improved.

3 Q And do you have an expert opinion on whether  
4 or not those differences are attributable to innate  
5 physiological characteristics? 11:27:41

6 A As -- as a physician who works with athletes  
7 of all ages, every day, I do have an opinion that  
8 biology plays a role in the measured performance  
9 differences that exist in the literature with  
10 respect to prepubertal children, yes. 11:28:11

11 Q So you said biology plays a role.  
12 Is biology the exclusive thing that plays a  
13 role?

14 A I'm not aware of any peer-reviewed study that  
15 looks at the exact contribution of biology versus 11:28:36  
16 other causes when it comes to performance in  
17 prepubertal children.

18 Q Are you -- are you aware of any data  
19 measuring the performance of transgender girls  
20 before puberty in -- in athletic contests or 11:28:51  
21 physical fitness studies?

22 A I'm not aware of any literature looking  
23 specifically at prepubertal transgender girls in --  
24 in their performance of sport, no.

25 Q Just to clarify the scope of your expert 11:29:14

1 opinions in this case, are you providing an expert  
2 opinion in this case regarding athletic advantages  
3 between males and females?

4 MR. FRAMPTON: Objection; form.

5 Go ahead.

11:29:46

6 THE WITNESS: I am providing an opinion in  
7 this case on the safety issues that exist when those  
8 of one sex cross over and participate in sports.

9 BY MR. BLOCK:

10 Q So -- so your expert opinion in this case is 11:30:01  
11 exclusively about the safety issues; correct?

12 THE VIDEOGRAPHER: I believe Dr. Carlson's  
13 Internet might have been having a problem. You  
14 might need to repeat your question.

15 MR. BLOCK: Sure.

11:30:37

16 BY MR. BLOCK:

17 Q So your expert testimony in this case is  
18 exclusively about the safety issues involved when  
19 males and females play together; right?

20 MR. FRAMPTON: Objection; form.

11:30:53

21 Go ahead.

22 THE WITNESS: It is about the safety issues  
23 that are involved when males and -- when males cross  
24 over into women's sports particularly, and some of  
25 that opinion relates to differences in certain

11:31:08

1 variables, such as speed.

2 BY MR. BLOCK:

3 Q You're not providing an expert opinion on the  
4 fairness of allowing transgender girls to  
5 participate on girls' teams; right? 11:31:29

6 A I'm not providing an opinion on fairness as  
7 relates to transgender participation, no.

8 Q If you could go to paragraph 21 of your  
9 report -- it's on page 15. So about four lines from  
10 the top -- there's a sentence that begins with "To 11:32:12  
11 the latter point."

12 A "To the latter point, children don't play  
13 contact sports..."?

14 Q Yeah. So it says (as read):

15 "To the latter point, children don't 11:32:28  
16 play contact sports with adults and,  
17 in a great majority of cases, men  
18 and women compete in categories  
19 specific to their own biological  
20 sex." 11:32:37

21 Do you see that?

22 A I do.

23 Q Okay. And so that sentence has been changed  
24 from the version of that sentence that appeared in  
25 your June 2021 report; correct? 11:32:49

1           A    I can't recall. I'd have to go back and look  
2           at that report.

3           Q    Okay. Let's go back and look at it. It's on  
4           page 11 of your earlier report.

5           A    Okay. 11:33:37

6           Q    All right. So on page 11 of your report,  
7           paragraph 18, a couple lines from the bottom, it  
8           says (as read):

9                    "To the latter point, children don't  
10                   play contact sports with adults and, 11:33:45  
11                   as has already been discussed, after  
12                   the onset of puberty, men and women  
13                   compete in categories specific to  
14                   their own biological sex."

15           Do you see that? 11:33:54

16           A    I do.

17           Q    Okay. And so then in your February report,  
18           the -- the words after "the onset of puberty" are  
19           taken out, and the words "in the great majority of  
20           cases" are -- are put in; is that right? 11:34:10

21           A    Correct.

22           Q    Okay. And so why did you make that change?

23           A    Well, I believe, as we had discussed, the  
24           focus on the first draft was primarily in the  
25           adolescent age and later, and the second draft was 11:34:23

Page 111



1 expanded slightly to include consideration of the  
2 prepubertal athlete. And since sport -- gender --  
3 or sex stratification in youth teams is still widely  
4 prevalent, they altered those words.

5 Q Are you providing an expert opinion in this 11:34:50  
6 case about transgender girls and women who never go  
7 through endogenous puberty as a result of puberty  
8 blockers followed by gender-affirming hormones?

9 MR. FRAMPTON: Objection; form.

10 THE WITNESS: Can you -- you ask that one 11:35:07  
11 more time?

12 BY MR. BLOCK:

13 Q Yeah. So are you providing an expert  
14 report -- excuse me, I'll say it again.

15 Are you providing an expert opinion in this 11:35:14  
16 case about transgender girls and women who never go  
17 through endogenous puberty as a result of taking  
18 puberty blockers followed by gender-affirming  
19 hormones?

20 MR. FRAMPTON: Same objection. 11:35:29  
21 Go ahead.

22 THE WITNESS: So to the extent that they are  
23 prepubertal biological males, yes.

24 BY MR. BLOCK:

25 Q How about to the extent that they have 11:35:36

1 received puberty blockers followed by  
2 gender-affirming hormones to stimulate the  
3 equivalent of a typically female puberty?

4 MR. FRAMPTON: Objection; form.

5 THE WITNESS: My opinion in this case extends 11:35:51  
6 to sports safety issues in both the prepubertal and  
7 the pubertal population.

8 BY MR. BLOCK:

9 Q Okay. Does it address safety issues of the  
10 participation of transgender girls and women who 11:36:11  
11 receive puberty blockers and then receive  
12 gender-affirming hormone therapy that has effects on  
13 bone and muscle structure and causes them to  
14 develop, you know, typically female hips and -- and  
15 things like that? 11:36:26

16 MR. FRAMPTON: Objection to form.

17 MR. TRYON: Objection; form.

18 THE WITNESS: That's -- that's a complex  
19 question. Can you unpack that a little bit?

20 BY MR. BLOCK: 11:36:39

21 Q Sure. So you, so far -- in response to my  
22 questions about people who have blockers, you've  
23 equated transgender girls who have blockers to  
24 prepubertal boys and someone who has -- a  
25 transgender girl who has puberty blockers and then 11:36:52

1 receives gender-affirming hormones, you know,  
2 stimulates a lot of other changes that prepubertal  
3 boys don't have; correct?

4 MR. FRAMPTON: Objection to form.

5 THE WITNESS: I don't -- 11:37:05

6 MR. FRAMPTON: Go ahead.

7 THE WITNESS: I don't think that that's been  
8 widely looked at. I know that there's -- I -- I  
9 don't think that that's been widely looked at or  
10 extensively looked at, as to what the effects of 11:37:16  
11 that treatment would be on athletic performance.

12 BY MR. BLOCK:

13 Q Are you providing an expert opinion on what  
14 the effects of that treatment would be on safety?

15 MR. FRAMPTON: Object to the form. 11:37:36

16 Go ahead.

17 THE WITNESS: I'm providing an opinion on the  
18 potential effects on safety of a biological male,  
19 even at age 10 or 11, pick your age, of crossing  
20 over into a woman's sport and participating in 11:37:53  
21 contact and collision sports.

22 BY MR. BLOCK:

23 Q All right. That's not the answer to my  
24 question. I -- I asked are you providing an expert  
25 opinion on the safety of -- of some -- a transgender 11:38:03

Page 114

1 girl who has received blockers and then  
2 gender-affirming hormones participating on girls'  
3 sports teams.

4 A Am I -- I -- I am providing an opinion on the  
5 potential safety issues of a hypothetical individual 11:38:39  
6 like this participating on girls' sport team --  
7 girls' sports teams, yes.

8 Q What -- what's your basis for providing an  
9 expert opinion regarding a transgender girl who has  
10 received blockers and then gone on to receive 11:38:57  
11 gender-affirming hormones?

12 A That would have to do with whether or not  
13 there are differences between the sexes at the time  
14 of puberty.

15 Q Well, I'm talking about someone who has 11:39:21  
16 received blockers but then received gender-affirming  
17 hormones to stimulate the equivalent of a typically  
18 female puberty.

19 Are you -- what's your basis for providing an  
20 expert opinion on the safety risks of that person 11:39:39  
21 participating on girls' sports?

22 MR. TRYON: Objection.

23 THE WITNESS: To my --

24 MR. FRAMPTON: Objection to form.

25 ///

1 BY MR. BLOCK:

2 Q You can answer.

3 A There's not extensive research looking at the  
4 situation that you're talking about.

5 Q So -- 11:39:59

6 A The effect of sports -- of gender-affirming  
7 hormones on sports participation.

8 Q So if there's not a lot of research, do you  
9 have a basis for offering an expert opinion about  
10 it? 11:40:16

11 MR. FRAMPTON: Same objection.

12 Go ahead.

13 THE WITNESS: My opinion is grounded in an  
14 understanding of what plays into injury risk and  
15 differences that exist between the sexes. 11:40:30

16 BY MR. BLOCK:

17 Q Do you know what differences exist for --  
18 between a cisgender woman and a transgender woman  
19 who received puberty blockers followed by  
20 gender-affirming hormones? 11:40:49

21 MR. TRYON: Objection to form.

22 THE WITNESS: My -- my understanding is there  
23 is retained differences in lean body mass between  
24 them.

25 ///

1 BY MR. BLOCK:

2 Q What's that understanding based on?

3 A The one study I'm familiar with that looked  
4 at that, which was authored by Klaver.

5 Q And that's a study that you didn't cite in 11:41:10  
6 your report; correct?

7 A Correct.

8 Q You only looked at that study for the first  
9 time in preparing for this deposition; correct?

10 MR. FRAMPTON: Objection to the form. 11:41:22

11 BY MR. BLOCK:

12 Q You can answer.

13 A I looked at it in preparation for this  
14 deposition, yes.

15 Q So you looked at it for the first time after 11:41:37  
16 you had already submitted your report; correct?

17 A Correct.

18 Q And is it your understanding that the people  
19 in that study received puberty blockers at the  
20 beginning of Tanner II? 11:41:49

21 A Around -- I believe around age 13, 14.

22 Q And as a medical doctor, what's your  
23 understanding of when Tanner II typically begins for  
24 boys?

25 A Again, I'm a sports medicine physician. I'm 11:42:05

Page 117

1 not an endocrinologist.

2 Q Well --

3 MR. FRAMPTON: Did it not pick up his answer?

4 I thought he answered the -- there was no reaction

5 when he said an age, so I just wanted to make sure 11:42:27

6 it was picked up.

7 MR. BLOCK: It was not.

8 MR. FRAMPTON: Okay.

9 THE WITNESS: I said age 12.

10 BY MR. BLOCK: 11:42:34

11 Q Age 12.

12 Have you done any modeling of the safety

13 risks associated with prepubertal boys playing on

14 sports teams with prepubertal girls?

15 MR. FRAMPTON: Objection to the form. 11:42:57

16 Go ahead.

17 THE WITNESS: Define what you mean by

18 "modeling."

19 BY MR. BLOCK:

20 Q You discuss modeling of safety risks in your 11:43:08

21 report, don't you?

22 A Correct.

23 Q So that's what I mean by "modeling."

24 Have you conducted any modeling of the safety

25 risks of prepubertal boys playing on teams with 11:43:22

Page 118

1 prepubertal girls?

2 A I'm not sure what you mean by modeling these  
3 risks. The -- the extent to which prepubertal kids  
4 do or don't fit into that model depends on whether  
5 there are measurable differences between the sexes 11:43:50  
6 in terms of things like speed or strength.

7 Q And so --

8 A To the extent that there are measurable  
9 differences noted between them, then, yes, the model  
10 applies. 11:44:13

11 Q But you haven't actually done that modeling,  
12 have you?

13 MR. FRAMPTON: Objection to the form.

14 THE WITNESS: I thought I answered that  
15 question. I'm not sure -- do you mean have I 11:44:22  
16 published data on that?

17 BY MR. BLOCK:

18 Q Not have you published it. Have you done it  
19 yourself? Have you plugged the values into  
20 equations and -- and come up with a model similar 11:44:35  
21 to, you know, rugby's model?

22 MR. FRAMPTON: Objection to the form.

23 Go ahead.

24 THE WITNESS: Have I taken a calculator and  
25 calculated this out with prepubertals? I'm not sure 11:44:56

Page 119



1 I understand why that's necessary.

2 If -- if -- there either are or there aren't  
3 differences between the sexes in terms of variables  
4 that equate to athletic performance or -- or lead to  
5 athletic performance, and if there are, then 11:45:19  
6 absolute injury risk can be increased.

7 BY MR. BLOCK:

8 Q So you don't -- no -- no matter how small a  
9 difference is, you don't think that's relevant to  
10 assessing, you know, safety risks? 11:45:33

11 MR. FRAMPTON: Object to the form.

12 THE WITNESS: I'm not sure what you're asking  
13 there, but -- but measurable differences can lead to  
14 increased safety risk, yes.

15 BY MR. BLOCK: 11:45:55

16 Q World Rugby actually calculated a -- a model  
17 of the safety risks of an average man playing rugby  
18 with an average woman; correct?

19 A Correct. That was part of their process.

20 Q Okay. And so they went through the steps of 11:46:12  
21 actually calculating it; correct?

22 A They did.

23 Q Okay. And -- but you did not go through  
24 those steps for purposes of calculating a safety  
25 risk of an -- prepubertal boys playing on teams with 11:46:26

Page 120

1 prepubertal girls; right?

2 MR. FRAMPTON: Same objection.

3 THE WITNESS: Well, I think I speak to the --

4 in the paper as to how that risk might be

5 calculated. 11:46:39

6 BY MR. BLOCK:

7 Q Yeah, you -- you spoke to how it might be

8 calculated, but you didn't actually calculate it;

9 correct?

10 A I'm not -- I'm not sure where you're going 11:46:46

11 with that, but --

12 Q I just need a "yes" or "no" answer whether

13 you did it or not.

14 MR. FRAMPTON: Object to the form.

15 Go ahead. 11:46:55

16 BY MR. BLOCK:

17 Q You did not actually go through the steps of

18 calculating the model of the safety risk for

19 prepubertal boys playing with prepubertal girls?

20 A I did not take, for example, an 11:47:02

21 eight-year-old male and -- his mass and speed into a

22 force equation and then compare it to another

23 eight-year-old female. I'm not sure what that

24 was -- would accomplish.

25 Q Okay. So how -- so you don't have the -- the 11:47:19

Page 121

1 modeling data to compare the relative risk for  
2 prepubertal kids to the relative risk for men and  
3 women after puberty, do you?

4 A I do not have a database to present to you,  
5 no. 11:47:41

6 Q Is it your understanding that the risk is  
7 smaller for prepubertal kids than for people after  
8 puberty?

9 MR. TRYON: Objection; form of the question.

10 MR. FRAMPTON: Same objection. 11:47:57

11 THE WITNESS: Do you want to rephrase?

12 BY MR. BLOCK:

13 Q Is -- is it your understanding that the  
14 increased risk is smaller with respect to  
15 prepubertal boys and girls than adult men and women? 11:48:10

16 MR. TRYON: Objection to form.

17 THE WITNESS: I'm asked -- I'm retained to  
18 look to -- to weigh in on whether or not a risk  
19 exists, and based on differences between the sexes,  
20 even at a prepubertal age, a heightened risk exists. 11:48:28

21 BY MR. BLOCK:

22 Q So -- wait, so -- so your expert opinion is  
23 only whether or not there is exists -- a risk  
24 exists, not on how great the risk is?

25 MR. FRAMPTON: Object to the form. 11:48:42

1 THE WITNESS: I can -- I can speak to the  
2 fact that the risk is going to be greater with a  
3 larger, faster, more powerful individual than it  
4 would be with somebody who is less so, but as long  
5 as there are retained differences, there's still 11:49:01  
6 risk.

7 BY MR. BLOCK:

8 Q Have you calculated the difference in risk  
9 from a woman with PCOS participating in women's  
10 sports? 11:49:19

11 A I'm not -- I haven't been retained to weigh  
12 in on individuals with disorders of sexual  
13 development.

14 Q Okay. So do you -- you don't know one way or  
15 another whether or not there's an increased risk 11:49:32  
16 when a woman with PCOS plays with other women in --  
17 in female sports?

18 MR. TRYON: Objection to form.

19 MR. FRAMPTON: Object to the form.

20 THE WITNESS: I have not looked at that 11:49:49  
21 specifically.

22 BY MR. BLOCK:

23 Q So --

24 A To my knowledge, there is not a peer-reviewed  
25 study looking at individuals who have PCOS and their 11:49:56

1 imparted risk on an athletic field.

2 Q And there's no peer-reviewed study looking at  
3 prepubertal kids and their -- boys and their  
4 imparted risk on an athletic field, is there?

5 A That's why I was retained. 11:50:18

6 Q Okay. And there's no peer-reviewed study  
7 looking at transgender women and their risk to other  
8 women from participating in an athletic field;  
9 right?

10 MR. FRAMPTON: Object to the form. 11:50:30

11 Go ahead.

12 THE WITNESS: There are multiple studies that  
13 show retention of significant differences in the  
14 types of things that would lead to disparities in  
15 strength, power, speed, etcetera, all of which can 11:50:47  
16 contribute to heightened injury risk, which was the  
17 underpinning of World Rugby's finding.

18 BY MR. BLOCK:

19 Q Right. But --

20 MR. BLOCK: Can you read back my question, 11:50:58  
21 Court Reporter.

22 (Record read.)

23 MR. FRAMPTON: Same objection.

24 MR. TRYON: Objection; form.

25 THE WITNESS: To my knowledge, there has been 11:51:21

1 no peer-reviewed study looking at the injury risk  
2 that exists to cisgender women when transgender  
3 women cross over and play. That issue is, to my  
4 knowledge, not often tracked.

5 BY MR. BLOCK: 11:51:45

6 Q Can we look at page 2 of your report.

7 A Which report are you talking about?

8 Q Your -- your February report.

9 MR. FRAMPTON: I'm sorry, Josh, what -- what  
10 page did you tell him to go to? 11:52:05

11 MR. BLOCK: Page 2. Exhibit --

12 MR. TRYON: Which exhibit is this, please?

13 MR. BLOCK: 80. Exhibit 80.

14 THE WITNESS: Okay.

15 BY MR. BLOCK: 11:52:26

16 Q If you look at the -- the final sentence, at  
17 the bottom, that begins with "As a medical doctor."

18 A Okay.

19 Q It says (as read):

20 "As a medical doctor who has spent 11:52:32

21 my career in sports medicine, it is

22 my opinion that World Rugby's

23 assessment of the evidence is

24 scientifically sound, and that

25 injury modeling meaningfully 11:52:41

Page 125

1 predicts that biologically male  
2 transgender athletes do constitute a  
3 safety risk for the biologically  
4 female athlete in women's sports."

5 Did I read that right? 11:52:53

6 A Yes.

7 Q And so you think that World Rugby did a  
8 thorough job; correct?

9 A I think that their approach, as they've  
10 described it, was sound. I wouldn't say that they 11:53:10  
11 did a thorough job, no.

12 Q Why wouldn't you?

13 A Because the research database that they  
14 published relates completely to adult athletes or  
15 postpubescent athletes. 11:53:33

16 Q How do you know that?

17 A Because I've looked at it.

18 Q When did you look at it to determine whether  
19 it relates solely to adult athletes?

20 MR. FRAMPTON: Object to the form. 11:53:46

21 Go ahead.

22 THE WITNESS: I -- I can't tell you that  
23 exactly. It would have been around the time that I  
24 was reformatting this report.

25 ///

1 BY MR. BLOCK:

2 Q So you looked more closely at that issue, you  
3 know, after the first version of your report was  
4 filed; right?

5 A Yes. 11:54:00

6 Q What is World Rugby's policy with respect to  
7 the participation of transgender women who have had  
8 puberty blockers followed by gender-affirming  
9 hormones?

10 A By understanding is that they, in their 11:54:13  
11 policy statement, have stated that those individuals  
12 are not subject to the same exclusions.

13 Q When did you become aware that World Rugby  
14 allows those individuals to participate?

15 MR. FRAMPTON: Object to the form. 11:54:36

16 THE WITNESS: Well, it's -- it's in their  
17 report. So I don't recall. I mean, at -- again, at  
18 the point in time that I was reviewing their data.  
19 I can't tell you when that was.

20 BY MR. BLOCK: 11:54:47

21 Q When -- when you submitted your June 2021  
22 report, were you aware that World Rugby allowed  
23 transgender women to participate if they had  
24 received blockers and never gone through endogenous  
25 puberty? 11:55:02

Page 127



1 MR. FRAMPTON: Objection; form.

2 Go ahead.

3 THE WITNESS: I can't -- I can't recall. I  
4 can't speak to that. Again, it wasn't really the  
5 focus of that report. 11:55:17

6 BY MR. BLOCK:

7 Q So do -- do you think that you know better  
8 than World Rugby about the safety risks of allowing  
9 a transgender woman to play if she's received  
10 blockers followed by gender-affirming care? 11:55:31

11 MR. FRAMPTON: Objection to form.

12 MR. TRYON: Objection to form.

13 MR. FRAMPTON: Go ahead.

14 THE WITNESS: I think with any set of  
15 guidelines, clinicians particularity, since these 11:55:41  
16 types of things bear relevance on what we do, we  
17 have to kind of look at everything and make  
18 determinations based on what we know and what's  
19 being said.

20 And so I -- I can agree with the bulk of the 11:55:54  
21 findings of World Rugby, particularly with regards  
22 to the type of athlete that's reflected in the  
23 literature review that they've provided, and still  
24 take exception with the idea that there isn't  
25 risk -- that there isn't a risk consideration with 11:56:21

Page 128

1 prepubertal athletes.

2 BY MR. BLOCK:

3 Q Do -- you don't -- do you think that the

4 degree of -- of risk is relevant in determining

5 whether it justifies an exclusion?

11:56:30

6 A That's a policy --

7 MR. FRAMPTON: Objection to form and scope.

8 Go ahead.

9 THE WITNESS: That's a policy issue. That's

10 not my job. My job is just to say is there a risk.

11:56:40

11 BY MR. BLOCK:

12 Q All right. Well, there's increased risk from

13 the participation of a taller cisgender woman;

14 correct?

15 A That's a vague question. Can you restate it?

11:56:52

16 Q Yeah. So the taller -- so when -- the taller

17 a female athlete is, the more she increases the risk

18 of injury for other female athletes; correct?

19 A Again, I don't feel like I can answer that

20 question. You're not providing me with enough

11:57:19

21 context.

22 Q Well, you said as long as there's a

23 difference, that that can create risk.

24 So doesn't height affect the safety risks for

25 other athletes?

11:57:33

Page 129

1           A    Height in the context of what? Give me  
2           context.

3           Q    How about volleyball.

4           A    Okay. So ask it in -- in the context of  
5           volleyball. 11:57:49

6           Q    So the taller a female athlete is, the  
7           greater risk she poses to other female athletes in  
8           volleyball; correct?

9           A    So we're talking about biological females  
10          playing with each other? Is that what we're talking 11:57:59  
11          about?

12          Q    Yes.

13          A    I -- I think with -- when it comes to  
14          biological females playing together, they tend to --  
15          there are outliers, of course, but they're outliers 11:58:16  
16          within a relatively defined biological pool.

17                To your question, if you have a really tall  
18          athlete in volleyball, at the net, they're going to  
19          be able to spike the ball vertically, theoretically,  
20          or forcefully, but it's not just height that plays 11:58:42  
21          into that. It's leg strength. It's jumping  
22          ability. It's arm extension. So you've got a  
23          convergence of factors that are going to play into  
24          it.

25                But -- but within the sexes, yeah, you can 11:58:55

1 have some individuals that provide -- who -- who are  
2 larger and taller, stronger than others.

3 But that's not the same thing as blending  
4 sexes.

5 Q So -- but you're not -- you're not providing 11:59:17  
6 an expert opinion on the degree of risks; correct?  
7 You're just providing an expert opinion on whether a  
8 risk of any amount exists?

9 MR. FRAMPTON: Objection to the form.

10 THE WITNESS: I was retained in this case to 11:59:33  
11 provide an opinion on whether there -- there's a  
12 safety risk associated with gender crossover in  
13 interscholastic sports.

14 BY MR. BLOCK:

15 Q So -- 11:59:47

16 A And it's not my role to determine the  
17 relevance of absolute risk; it's just to say whether  
18 a risk exists.

19 Q Okay. So you're not providing an expert  
20 opinion comparing the degree of risk from allowing a 12:00:03  
21 transgender woman to compete to the degree of risk  
22 from allowing any particular cisgender woman to  
23 compete?

24 A Well, I didn't say that.

25 MR. FRAMPTON: Objection to the form. 12:00:18

1 BY MR. BLOCK:

2 Q That's my question.

3 So -- so you're -- are you -- are you -- are  
4 you providing an opinion that allowing a transgender  
5 woman who's received blockers to compete with other 12:00:27  
6 women provides a greater safety risk than allowing  
7 certain cisgender women to compete on the team?

8 MR. FRAMPTON: Objection to the form.

9 THE WITNESS: I am arguing that allowing a  
10 transgender -- a biologically born male who 12:00:47  
11 transitions to a female and plays on a female sports  
12 team, I am arguing that there are safety risks  
13 associated with that, yes.

14 BY MR. BLOCK:

15 Q So -- so I'm focusing now -- 12:01:09

16 A That have the potential to exceed that of  
17 overall risks when cisgender athletes are playing  
18 together.

19 Q So I'm -- I'm focusing specifically on a  
20 transgender woman who has received blockers followed 12:01:23  
21 by gender-affirming care. So I want to focus your  
22 attention on that specific fact pattern.

23 The only physiological difference that has  
24 been identified in your report, you know, for that  
25 population of people, is potentially 10 percent 12:01:36

Page 132

1 greater lean body mass.

2 And my question is, are you providing an  
3 expert opinion on whether there's a greater risk for  
4 allowing that person to participate on a woman's  
5 team than allowing a cisgender woman with 10 percent 12:01:56  
6 greater body mass than the average woman participate  
7 on a woman's team?

8 MR. FRAMPTON: Objection to the form.

9 Go ahead.

10 THE WITNESS: You're comparing apples and 12:02:06  
11 oranges because you're talking about a biological  
12 male that brings a certain -- that can bring certain  
13 characteristics to puberty with him.

14 BY MR. BLOCK:

15 Q Well, the only characteristic identified is 12:02:21  
16 10 percent difference in body mass.

17 A That's the only characteristic you  
18 identified.

19 Q What -- what other physiological  
20 characteristic, you know, exists? 12:02:31

21 A Again, going back to published data on  
22 performance in the elementary school population,  
23 there are consistent findings of greater strength  
24 and speed in preadolescent boys than preadolescent  
25 girls. 12:02:56

1 Q But those -- those aren't -- those aren't  
2 discussions of physiological -- innate physiological  
3 characteristics, are they?

4 A We don't know that.

5 MR. FRAMPTON: Object to the form. 12:03:04

6 THE WITNESS: We -- we -- I -- in fact, I  
7 suspect that there's a significant biological  
8 contribution to that.

9 BY MR. BLOCK:

10 Q So what -- what -- what study have you done 12:03:13  
11 on physiological differences between prepubertal  
12 boys and girls?

13 A What study have I done?

14 MR. FRAMPTON: Objection to the form.

15 THE WITNESS: Is that what you said? 12:03:23

16 BY MR. BLOCK:

17 Q Yeah.

18 MR. FRAMPTON: Objection to the form.

19 Answer the question.

20 THE WITNESS: I have not conducted a study on 12:03:27  
21 physiological differences between preadolescent boys  
22 and girls.

23 BY MR. BLOCK:

24 Q All right. Are there -- are there  
25 differences in bone structure between preadolescent 12:03:35

1 boys and girls, you know, relevant to athletic  
2 performance?

3 A I believe that the differences that exist  
4 between boys and girls are performance based. There  
5 is a biological difference in lean body mass between 12:04:04  
6 boys and girls that manifest at a very early age.  
7 There are other performance-based measures that  
8 contribute to risk that are well defined.

9 Q So focusing on 10 percent difference in lean  
10 body mass that -- on average, are you providing an 12:04:20  
11 opinion on whether -- if the only physiological  
12 difference is 10 percent lean body mass -- let me  
13 phra that -- phrase that again.

14 Are you providing an expert opinion comparing  
15 the risk associated with allowing a transgender 12:04:41  
16 woman who has been on blockers and hormones and has  
17 10 percent greater lean body mass than a cisgender  
18 woman to the risk of allowing a cisgender woman with  
19 10 percent greater lean body mass than an average  
20 cisgender woman to participate in women's sports? 12:05:01

21 MR. TRYON: Objection to form.

22 MR. FRAMPTON: Objection to form and scope.

23 THE WITNESS: That question has assumptions  
24 in it that I think keep me from answering it.

25 ///



1 BY MR. BLOCK:

2 Q The --

3 A You're -- you're -- you're equating the two  
4 without acknowledging that there are sex-based  
5 differences in performance that play into injury 12:05:28  
6 risk that are brought to that point.

7 So I don't know how to answer your question.

8 Q You -- you know, are -- you've said  
9 repeatedly you're not providing an opinion  
10 quantifying the amount of risk; you're just 12:05:48  
11 providing an opinion that some quantum of increased  
12 risk exists; correct?

13 A Correct.

14 MR. FRAMPTON: Object to the form.

15 BY MR. BLOCK: 12:06:05

16 Q I didn't hear the answer.

17 A I'm providing an opinion as to the fact that  
18 there is risk.

19 Q And there is also increased risk when a  
20 cisgender woman with 10 percent greater lean body 12:06:12  
21 mass than an average cisgender woman participates in  
22 women's sports; correct?

23 MR. TRYON: Objection to form.

24 MR. FRAMPTON: Same objection.

25 THE WITNESS: Repeat that question. 12:06:27

Page 136

1 MR. BLOCK:

2 Q There is an increased risk to safety when a  
3 cisgender woman with 10 percent greater lean body  
4 mass than an average cisgender woman participates in  
5 women's sports; correct? 12:06:39

6 MR. TRYON: Objection.

7 MR. FRAMPTON: Objection.

8 THE WITNESS: I didn't say that.

9 BY MR. BLOCK:

10 Q Is there or is there not? 12:06:43

11 A There's more than just that variable that  
12 play into injury risk with --

13 Q There might be -- there might -- I'm sorry, I  
14 said I wouldn't cut you off. Go ahead and answer.

15 A If the question was is a cisgender woman with 12:07:02  
16 10 percent increased lean body mass, in part, higher  
17 injury risk to other female cisgender athletes, the  
18 answer is you can't answer that question because  
19 there are other things that play in.

20 Q I don't -- 12:07:22

21 A I'm saying is the -- you're phrasing this  
22 question as if the only difference between an  
23 individual who comes to the point of going onto  
24 puberty blockers is a 10 percent difference in lean  
25 body mass, and I'm telling you that there are 12:07:42

Page 137

1 population-based performance differences between the  
2 sexes that exist prior to that.

3 Q All right. So --

4 A I'm not sure how to answer that question.

5 Q Are there any differences in the Klaver study 12:07:59  
6 identified between cisgender women and the  
7 transgender women in the study other than the  
8 10 percent greater lean body mass?

9 A Some differences in fat distribution.

10 Q There are differences in -- in fat 12:08:17  
11 distribution at the end of the period?

12 A There are.

13 Q You know what? I'll come back to that. I  
14 don't want to waste my time.

15 I'm still struggling with your -- your answer 12:08:47  
16 to whether or not you're capable of providing an  
17 expert opinion comparing the risks of allowing a  
18 transgender woman to participate to the risks of  
19 allowing an unusually tall or an unusually strong  
20 cisgender woman to participate. So I -- 12:09:03

21 MR. FRAMPTON: Object --

22 MR. BLOCK: I -- I haven't finished my  
23 question yet. You can object --

24 MR. FRAMPTON: I'm sorry. My apologies.

25 MR. BLOCK: Yeah. Okay. 12:09:12

Page 138

1 BY MR. BLOCK:

2 Q So I'm -- I'm still struggling with that.

3 So are you -- are you or are you not

4 providing an expert opinion comparing the relative

5 risks between transgender women participating and 12:09:26

6 between unusually strong or tall cisgender women

7 participating in women's sports?

8 A Yes.

9 MR. FRAMPTON: Object to form.

10 BY MR. BLOCK: 12:09:37

11 Q Yes, you are?

12 A Yes.

13 Q How -- okay. How are you able to provide

14 that opinion if you are unable to quantify the

15 amount of increased risk for -- when transgender 12:09:44

16 women participate?

17 MR. FRAMPTON: Same objection.

18 Go ahead.

19 THE WITNESS: You don't need to quantify risk

20 in a -- in a modeling scenario to know that risk is 12:10:05

21 increased. The model -- going back to World Rugby,

22 to just consideration of issues like speed, power,

23 mass.

24 BY MR. BLOCK:

25 Q How are you able to compare two things 12:10:34

1 without quantifying them?

2 A Well, I don't think either side has been  
3 quantified, has it?

4 Q Well, no.

5 So how do you know that the risks of allowing 12:10:47  
6 a transgender woman who's been on blockers and  
7 gender-affirming hormones to participate is greater  
8 or less than the risk of allowing an unusually  
9 strong or tall cisgender woman to participate on  
10 women's sports? 12:11:06

11 MR. TRYON: Objection --

12 THE WITNESS: I think that goes --

13 MR. TRYON: -- to the form of the question.

14 THE WITNESS: -- to the whole -- the whole  
15 heart of this case, which is that when you bring 12:11:11  
16 biological males into a pool of biological females,  
17 that you're bringing not just in body mass, but --  
18 but a other list of -- of retained differences that  
19 have the potential to be greater than -- than  
20 anything that you're going to see in that second 12:11:37  
21 pool of -- of athletes.

22 And -- and so normal variation between the  
23 sexes and what that means for injury doesn't look  
24 the same as what it -- what that risk would look  
25 like if you're bringing somebody who isn't in that 12:11:56

1 category and placing them in that second group.

2 That was the whole point of World Rugby's

3 assertions.

4 BY MR. BLOCK:

5 Q The differences between cisgender men and 12:12:06  
6 cisgender women are far greater than a 10 percent  
7 difference in lean body mass; correct?

8 A 10 percent -- say that one more time.

9 Q The differences between cisgender men and  
10 cisgender women that were analyzed by World Rugby 12:12:23  
11 were far greater than a difference in 10 percent  
12 lean body mass; correct?

13 MR. FRAMPTON: Objection to the form.

14 Go ahead.

15 THE WITNESS: I believe that's accurate. 12:12:36  
16 I'm -- I would have to go back and look at the  
17 report.

18 BY MR. BLOCK:

19 Q So, in fact, the differences between adult  
20 cisgender men and adult cisgender women are far 12:12:45  
21 greater than the differences between prepubertal  
22 boys and prepubertal girls; correct?

23 MR. FRAMPTON: Objection to the form.

24 THE WITNESS: There is a -- are you talking  
25 about lean body mass? 12:13:03

Page 141

1 BY MR. BLOCK:

2 Q I'm talking about across the board.

3 MR. FRAMPTON: Same objection.

4 THE WITNESS: The -- the differences are  
5 greater between adult men and women than prepubertal 12:13:14  
6 boys and girls, yes.

7 BY MR. BLOCK:

8 Q They're -- they're far greater; correct?

9 A That's a subjective term, but I'll -- I'll  
10 say they're greater. 12:13:27

11 Q In fact, the differences is, between  
12 cisgender men and cisgender women -- actually --  
13 actually, let me -- let me quote the language from  
14 your report.

15 Let's go to page 9, paragraph 11 C. 12:13:41

16 Are you there?

17 A I'm there.

18 Q You are?

19 A I -- I am there.

20 Q Yeah. So it says (as read): 12:14:07

21 "Males exhibit large average  
22 advantages in size, weight, and  
23 physical capacity over  
24 females—often falling far outside  
25 female ranges." 12:14:15

Page 142

1 Do you see that?

2 A I do see that.

3 Q Okay. So the differences in things before  
4 puberty, do the -- do the size, weight and physical  
5 capacity of prepubertal boys fall far outside the -- 12:14:34  
6 the range of prepubertal girls?

7 A Well, I would say that the physical capacity  
8 of boys consistently is shown to exceed that of  
9 girls in many different ways of looking at it, yes.

10 Q It falls far outside the female range? 12:14:52

11 A Male -- males consistently exceed female  
12 performance in the preadolescent population in  
13 measurements such as upper body strength, speed,  
14 etcetera.

15 Q Does it fall outside the female range? 12:15:32

16 MR. FRAMPTON: Objection to form.

17 THE WITNESS: To some degree, when you look  
18 at individual records in age-based categories, you  
19 would have to say that they do.

20 BY MR. BLOCK: 12:16:10

21 Q Are you thinking of anything in particular?

22 A I'm thinking of categories in, for instance,  
23 track and field and weight lifting records.

24 Q There's weight lifting records for  
25 prepubertal boys and girls? 12:16:40

Page 143



1 A There are.

2 Q Like -- like, taking weights and -- and --  
3 and doing competition in weight lifting?

4 A There are.

5 Q Where? Where -- where are those records? 12:16:51  
6 Are they published anywhere?

7 A I believe they are. I'd have to -- I'd have  
8 to find them.

9 MR. FRAMPTON: Josh, we're -- we're over  
10 90 minutes. I don't want to cut you off, if you 12:17:17  
11 want to finish something, but I think it is an  
12 appropriate time for a break sometime in the near  
13 future.

14 MR. BLOCK: Yeah, sure, we can take a break.

15 Do you want to come back at -- how much time 12:17:31  
16 do you need? Half an hour or 45 minutes?

17 THE VIDEOGRAPHER: Can we go off the record?

18 MR. FRAMPTON: Yeah, let's go off the record.

19 Let's not do lunch at --

20 THE VIDEOGRAPHER: Hold on. Hold on. Hold 12:17:44  
21 on.

22 MR. FRAMPTON: Oh, I'm sorry.

23 THE VIDEOGRAPHER: Off the record at

24 12:18 p.m.

25 (Recess.) 12:27:58

1 THE VIDEOGRAPHER: We are on the record at  
2 12:28, Central Time.

3 BY MR. BLOCK:

4 Q Dr. Carlson, we've previously discussed that  
5 you're not an endocrinologist; right? 12:28:28

6 A Correct. I'm a board-certified sports  
7 medicine physician.

8 Q And you're not an expert in transgender  
9 medicine; right?

10 A I do not care for -- I do not run a clinic 12:28:40  
11 for transgender people, no.

12 Q Do you -- do you have any expertise in -- in  
13 the physiological changes that occur to a  
14 transgender person's body if they have puberty  
15 blockers followed by gender-affirming hormones? 12:29:07

16 MR. FRAMPTON: Object to the form.

17 Go ahead.

18 THE WITNESS: I'm not a board-certified  
19 endocrinologist. I know what I know based on review  
20 of the literature. 12:29:19

21 BY MR. BLOCK:

22 Q All right. So do you have any expertise to  
23 be an expert witness and offer an expert opinion on  
24 the physiological changes that occur when a  
25 transgender person has puberty blockers followed by 12:29:30

Page 145

1 gender-affirming hormones?

2 MR. FRAMPTON: Object to the form.

3 THE WITNESS: As that touches on

4 participation in sports, I am offering an opinion on

5 the safety profile of transgender athletes crossing 12:29:52

6 over into other -- to -- to a cisgender sport that

7 they're -- into cisgender sports.

8 BY MR. BLOCK:

9 Q That wasn't my question.

10 Do you have any expert -- do you have any 12:30:10

11 reasons for offering an expert opinion on what

12 physiological changes occur to a person's body if

13 they have puberty blockers followed by

14 gender-affirming hormones?

15 MR. FRAMPTON: Object to the form. 12:30:25

16 THE WITNESS: If you're asking if I can speak

17 to the one study that I'm aware of that looks at

18 that, then, yes, I -- I suppose I can speak to it.

19 BY MR. BLOCK:

20 Q No. So you're only aware of one study 12:30:43

21 that -- that speaks to the physiological changes

22 that occur when you have puberty blockers followed

23 by gender-affirming hormones?

24 A In -- I've -- I've told you the study that

25 I'm familiar with. 12:31:11

1 Q All right. So -- so you -- you've read a  
2 study by Klaver to prepare for this deposition. And  
3 other than that, do you have any knowledge of the  
4 physiological changes that occur when someone has  
5 puberty blockers followed by gender-affirming 12:31:22  
6 hormones?

7 A I'm not aware of other studies looking at  
8 what you're referencing.

9 Q Do you have any other form of knowledge about  
10 it? 12:31:37

11 A About it being the physiologic changes  
12 associated with the use of puberty blockers?

13 Q Followed by gender-affirming hormones.

14 A I'm going to be careful what I say here  
15 because much of what I've written in that white 12:32:13  
16 paper speaks to the effect of gender-affirming  
17 hormone therapy. So I want to parse that out from  
18 the issue of puberty blocker administration.

19 Q Are you still thinking about it?

20 A I thought I answered the question. 12:33:39

21 Q No, I'm sorry, if you did, it didn't come  
22 out. So I -- are you still thinking about it?

23 What -- what was the answer to your  
24 question -- to my question?

25 A I said that I want to be careful how I parse 12:33:48

1       that because a lot of my -- the information in my  
2       white paper speaks to the impact on athletic  
3       performance of gender-affirming hormones, and I want  
4       to make sure that you're only speaking to puberty  
5       blockers specifically. 12:34:11

6           Q    I'm speaking to puberty blockers followed by  
7       gender-affirming hormones, which is different from  
8       taking gender-affirming hormones after having  
9       already undergone puberty.

10           And so my question, do you have any basis of 12:34:24  
11       knowledge, other than this paper that you recently  
12       read, about the physiological changes that occur  
13       when someone has puberty blockers followed by  
14       gender-affirming hormones?

15           MR. TRYON:  Objection to form. 12:34:42

16           THE WITNESS:  That presupposes that, you  
17       know, the individuals that have transitioned, you  
18       know, in mid adolescence or what have you, weren't  
19       on pubertal blockers either.

20           So I don't -- I -- I -- I'm not -- I'm not 12:35:00  
21       trying to be evasive.  I'm just trying to understand  
22       your question.  Because what I'm telling you is  
23       that -- that I believe that there's basis on -- in  
24       the literature that's available to say that  
25       individuals that get to the cusp of puberty have -- 12:35:24

1       that there are measurable differences in performance  
2       that they bring with them and -- and that those  
3       differences are going to, in some way, equate to  
4       heightened risk.

5       BY MR. BLOCK:

12:35:42

6           Q     And I'm asking you to --

7           A     So -- and I get that you're -- you're trying  
8       to limit this conversation to the effect of pubertal  
9       blockers, and what I'm telling you is that if -- if  
10      you're going to -- you can't talk about that in a  
11      vacuum. There's other differences once that  
12      individual jumps over into sports play with the  
13      opposite sex will come into view.

12:35:56

14          Q     Do you have any expert basis -- do you have  
15      any basis for offering an expert opinion on what  
16      physiological differences are carried forward from  
17      having puberty blockers followed by gender-affirming  
18      hormones other than this article that you read  
19      recently?

12:36:15

20          A     I don't believe that --

12:36:31

21               MR. FRAMPTON:   Objection --

22               THE WITNESS:   -- that there are --

23               MR. FRAMPTON:   -- to the form.

24               Go ahead.   Go ahead.

25               THE WITNESS:   To my knowledge, there are not

12:36:37

1 peer-reviewed studies looking at the effect of  
2 puberty blockers on performance. So I don't -- I  
3 don't believe that that question can be answered.

4 BY MR. BLOCK:

5 Q So you -- you've made an assertion about 12:36:48  
6 physiological differences being carried forward. My  
7 question is whether you have any expert basis, of  
8 any kind, other than this article that you recently  
9 read, to testify about the effects of gen- -- of  
10 having puberty blockers followed by gender-affirming 12:37:09  
11 hormones on someone's physiology.

12 A You said --

13 MR. TRYON: Objection as to form.

14 THE WITNESS: -- performance.

15 MR. TRYON: Dr. Carlson -- 12:37:22

16 THE WITNESS: You said performance.

17 MR. TRYON: -- please -- Dr. Carlson, can you  
18 please just let me object first? Thanks.

19 Objection as to form.

20 Go ahead. 12:37:29

21 THE WITNESS: You're using two different  
22 terms. You -- you said performance earlier.

23 BY MR. BLOCK:

24 Q Physiology.

25 Do you have any expert basis of any kind to 12:37:34

1 offer an opinion on what physiological  
2 characteristics exist for someone who has had  
3 puberty blockers followed by gender-affirming  
4 hormones?

5 MR. TRYON: Same objection. 12:37:50

6 MR. FRAMPTON: Same objection.

7 THE WITNESS: My opinion on physiology for  
8 puberty-blocking hormones would be limited to that  
9 paper, but my opinion with respect to performance, I  
10 believe, carries more weight because, to my 12:38:06  
11 knowledge, there aren't studies looking at that  
12 question.

13 BY MR. BLOCK:

14 Q But you don't have any basis for offering an  
15 expert opinion on performance of people who have had 12:38:24  
16 puberty blockers followed by gender-affirming  
17 hormones either because there's no studies of that;  
18 correct?

19 MR. FRAMPTON: Objection --

20 THE WITNESS: It cuts both ways. 12:38:35

21 MR. FRAMPTON: -- to form.

22 BY MR. BLOCK:

23 Q So -- but you don't have a -- fine.

24 But answer my question.

25 You don't have an expert basis for offering 12:38:43



1 an opinion on it one way or another; correct?

2 MR. FRAMPTON: Objection to the form.

3 THE WITNESS: The opinion on safety in  
4 athletes who are crossing over into other gender  
5 sports takes into account considerations that go 12:38:57  
6 well beyond what you're talking about, so I don't --  
7 I don't accept the assumptions of the question.

8 BY MR. BLOCK:

9 Q My -- my question was do you have any basis  
10 for offering an expert opinion on performance 12:39:19  
11 advantages for people who have had puberty blockers  
12 followed by gender-affirming hormones since there's  
13 no studies of that one way or the other.

14 MR. FRAMPTON: Objection to the form.

15 THE WITNESS: And what I have told you -- 12:39:37  
16 Sorry.

17 And what I have told you, I -- I thought,  
18 several times, is that those individuals come into  
19 puberty carrying categorical distinctions that are  
20 sex based that contribute to risk, regardless of 12:39:57  
21 whether or not they transition.

22 BY MR. BLOCK:

23 Q But you have no expert basis for saying that  
24 they carry it through puberty and transition.  
25 You -- you're are offering an opinion about what 12:40:08

1 happens before puberty and transition, but there's  
2 no studies at all about, you know, what happens  
3 after transition. That's just something that you're  
4 saying, but there's no studies about it; correct?

5 A Well, again --

12:40:21

6 MR. FRAMPTON: Objection to the form.

7 Go ahead and answer.

8 THE WITNESS: Again, I've said many times  
9 that there are not published studies looking at  
10 performance in the individuals that you're  
11 describing once they've transitioned through  
12 puberty.

12:40:33

13 BY MR. BLOCK:

14 Q Does sex-determined pubertal skeletal growth  
15 and maturation have an effect on -- on the safety of  
16 allowing an athlete to compete?

12:41:34

17 A In the assumptions I'm making, it's not key.

18 Q It's not.

19 Well, let's go to -- to page -- I'll come  
20 back to it.

12:41:53

21 Do -- does bone length have a -- does bone  
22 size have an effect on muscle size?

23 A Does bone size have an effect on muscle size?

24 Q Yes. Does the -- does the size of someone's  
25 bones affect how, like, much muscle mass they can

12:42:42

1 put on those bones?

2 A There is an association there.

3 Q It's just an association?

4 A They play against each other. Large muscle  
5 mass creates greater bone mineralization too, just 12:43:05  
6 from the tug of the muscles on bones. So there's an  
7 association, yes.

8 Q Let's go to page? Page 1 of your report.

9 A Which report are we talking about?

10 Q Your -- your February report. 12:43:34

11 A Okay.

12 Q The final sentence of this first paragraph,  
13 you say (as read):

14 "And in fact, biologically male  
15 transgender athletes have competed 12:43:53  
16 in a wide range of high school,  
17 collegiate, and professional girls'  
18 or women's sports, including, at  
19 least, basketball, soccer,  
20 volleyball, softball, lacrosse, and 12:44:01  
21 even women's tackle football."

22 Correct?

23 A That's what that says.

24 Q Okay. Are you aware of any injuries  
25 resulting from their participation in those sports? 12:44:11

1 A I'm not -- I'm not --

2 MR. BLOCK: I think Mr. Carlson froze.

3 THE VIDEOGRAPHER: Yeah, just -- we should  
4 pause a sec.

5 (Technical issues.) 12:44:32

6 THE WITNESS: Because it's not adequately --

7 Sorry, I don't know if it's when I go to look  
8 at the document or what, but -- can you see me now?

9 BY MR. BLOCK:

10 Q You'll have to answer that again. 12:44:39

11 So are you aware of any injuries that have  
12 resulted from the participation of those transgender  
13 athletes?

14 A This issue is inadequately tracked, so no,  
15 I'm not aware. 12:44:57

16 Q Okay.

17 A Well, actually, that's not true.

18 Rephrase your question. I want to make sure  
19 I'm understanding it.

20 Q You wrote that (as read): 12:45:08

21 "In fact, biologically male  
22 transgender athletes have competed  
23 in a wide range of high school,  
24 collegiate, and professional girls'  
25 or women's sports, including, at

12:45:15

1 least, basketball, soccer,  
2 volleyball, softball, lacrosse, and  
3 even women's tackle football."

4 And my question is, are you aware of any  
5 injuries that resulted from the participation of 12:45:25  
6 transgender girls and women in those sports?

7 A And so my answer would be that's not  
8 adequately tracked, and so no, I'm not familiar.

9 Q Are you aware of any evidence that the  
10 participation of transgender women in these events 12:45:40  
11 actually has increased the frequency and severity of  
12 injury suffered by such gender female athletes?

13 A You're speaking to those sports listed?

14 Q Yes.

15 A Again, it's inadequately tracked, so I'm not 12:46:01  
16 familiar.

17 Q And let's go to paragraph 47 of that  
18 document, the same document. Page 27, paragraph 47.

19 A Page 27, you said?

20 Q Yeah. In paragraph 47, at the bottom. 12:46:29

21 A Okay.

22 Q It says (as read):

23 "In 2014, a male mixed-martial art  
24 fighter identifying as female and  
25 fighting under the name Fallon Fox 12:46:40

1           fought a woman named Tamikka Brents,  
2           and caused significant facial  
3           injuries in the course of their  
4           bout."

5           And then if you continue going -- this --           12:46:51  
6           this quote that you have in, you know, indentation  
7           has a footnote 15.

8           Do you see that?

9           A     I do.

10          Q     Okay. And the -- the website that that           12:47:04  
11          quotes to -- that that footnote goes to is  
12          bjj-world.com/transgender.mma-fighter-fallon-fox-  
13          breaks-skull-of-her-female-opponent; is that right?

14          A     That's what I see, yes.

15          Q     Okay. Did Fallon Fox actually break the           12:47:28  
16          skull of her opponent?

17          A     Well, I don't believe that -- I don't believe  
18          that he did, no.

19          Q     What -- what -- what --

20          A     I didn't make that claim. That's a link to a           12:47:40  
21          website page that just references to the event,  
22          so...

23          Q     Right. So what -- actually, the -- the  
24          injury that actually was sustained was an orbital  
25          fracture; correct?   12:47:52

1 A Yeah, it was a facial fracture.

2 Q Okay. And do you know how common orbital  
3 fractures are in MMA events?

4 A I -- I couldn't give you a specific --  
5 incidents, no. 12:48:08

6 Q No.

7 So -- so you don't know the rates of -- of  
8 orbital fractures, you know, among cisgender MMA  
9 competitors fighting each other; correct?

10 A No, I could give not give you that statistic. 12:48:18  
11 I -- I -- I don't recall it.

12 Q Do you know who the plaintiff is in this  
13 case?

14 A I -- I do not know who the plaintiff is. I  
15 know of -- the initials of the plaintiff. 12:48:44

16 Q Okay. Do you know how old the plaintiff is?

17 A I -- I actually couldn't tell you that.

18 Q Okay. Do you know what sports the plaintiff  
19 plays?

20 A I believe the plaintiff is a runner, but I'm 12:48:53  
21 not sure.

22 Q Do you know how the plain- -- do you know how  
23 the plaintiff has scored in physical fitness tests?

24 A No. I have no idea about the specifics of  
25 this case. 12:49:11

1 Q Okay. Do you know if, you know, whatever  
2 things you were referring to before, about, you  
3 know, skills, you know, acquired of preper --  
4 prepubertal boys, do you -- do you know anything  
5 about whether the plaintiff, you know, has any of 12:49:26  
6 those skills?

7 A I don't. And I believe that -- I told you  
8 that I -- I don't -- I'm not familiar with the  
9 particulars of your plaintiff. And to the extent  
10 that -- you know, this -- this is a -- I'm familiar 12:49:45  
11 with the -- I -- I'm under the impression that the  
12 law that's being challenged -- I'm -- I'm not  
13 familiar with the particulars of this case.

14 Q Do you know how much lean body mass the  
15 plaintiff has? 12:50:10

16 A I do not know how much lean body mass the  
17 plaintiff has.

18 Q Do you know if the plaintiff in this case has  
19 any physiological characteristics that would impact  
20 safety that are different than the physiological 12:50:25  
21 characteristics of a cisgender girl?

22 A I do not.

23 MR. FRAMPTON: Object to the form.

24 BY MR. BLOCK:

25 Q Sorry, could -- could I hear the answer -- 12:50:36



1 MR. FRAMPTON: That was probably garbled, but  
2 I object to the form.

3 Go ahead and answer the question.

4 THE WITNESS: I do not.

5 BY MR. BLOCK: 12:50:44

6 Q Do you know whether the participation of this  
7 plaintiff in sports would pose any more of a safety  
8 risk than the participation of any other cisgender  
9 girl in sports?

10 MR. FRAMPTON: Object to the form. 12:51:02

11 THE WITNESS: Because I don't know the  
12 particulars of this person, I certainly could not  
13 speak to that.

14 BY MR. BLOCK:

15 Q Are you providing an -- expert testimony at 12:51:15  
16 all regarding safety risks from cross-country?

17 A I was asked to provide a report on safety  
18 risks as relates to participation in -- of athletes  
19 in contact in collision sports, but that's  
20 defined -- the -- the nature of that is defined 12:51:42  
21 within my paper.

22 Q Okay. So it does not -- so contact and  
23 collision sports does not include cross-country;  
24 correct?

25 A That's correct. 12:51:52

1 Q And contact and collision sports doesn't  
2 include track and field; correct?

3 A Correct.

4 Q Okay. Do you -- would it be fair to say that  
5 the effects of male-to-female hormones on important 12:52:27  
6 determinants of athletic performance still remain  
7 largely unknown?

8 A I -- I -- I didn't hear -- the effects of  
9 male and female hormones on what?

10 Q On determinants of athletic performance 12:52:42  
11 remain largely unknown.

12 MR. FRAMPTON: Object to the form.

13 Go ahead.

14 THE WITNESS: What do you mean by "largely  
15 unknown"? 12:52:52

16 BY MR. BLOCK:

17 Q I don't know. Do you think it's a fair  
18 statement, that they remain largely unknown?

19 MR. FRAMPTON: Object to the form.

20 THE WITNESS: I think that there's good 12:53:04  
21 evidence that testosterone has a significant impact  
22 on performance.

23 BY MR. BLOCK:

24 Q But do you think the effects of lowering  
25 circulating testosterone on athletic performance 12:53:17

1 remains largely unknown?

2 MR. FRAMPTON: Same objection.

3 THE WITNESS: I wouldn't say largely unknown.

4 I'd say it's evolving and we've learned a lot over

5 the last few years. 12:53:33

6 BY MR. BLOCK:

7 Q Has there been any controlled research

8 evaluating how lowering circulating testosterone

9 influences aerobic or resistance training?

10 A There is -- there is a study on Air Force 12:53:45

11 cadets answering that question.

12 Q Has there been any study of the effects of

13 lowering circulating testosterone on bench presses

14 or leg presses or squats or dead lifts?

15 MR. FRAMPTON: Object to form. 12:54:20

16 THE WITNESS: I believe that those studies --

17 there are studies looking at the effect of

18 testosterone on things like punching power and...

19 BY MR. BLOCK:

20 Q Anything else? 12:54:56

21 A There -- there are -- there are studies

22 looking at -- I'm sorry, say the question one more

23 time.

24 Q Sure. Are there studies looking at the

25 effects of lowering circulating testosterone on 12:55:12

1 muscle strength in standard lifts, like bench press,  
2 leg press, squats, dead lifts?

3 MR. FRAMPTON: Objection to the form.

4 Go ahead.

5 THE WITNESS: I believe that there are 12:55:29  
6 studies looking at the effect of testosterone  
7 reduction on...

8 BY MR. BLOCK:

9 Q I'm sorry, did you finish answering the  
10 question? 12:56:09

11 A Are you talking about in transgender  
12 athletes, or are you talking about transgender  
13 individuals as a whole?

14 Q Either one.

15 A There -- there are -- there are studies 12:56:28  
16 looking at the effect of transition on loss of  
17 muscle mass, and there are studies looking at  
18 proxies for upper body strength, like grip strength,  
19 and there are studies looking at proxies for  
20 punching power. 12:56:57

21 Q But their -- their studies are looking at  
22 proxies for those things as opposed to measuring  
23 muscle -- muscle strength, you know, through bench  
24 presses, leg presses, squats or other traditional  
25 measurements of strength; correct? 12:57:14

1 MR. FRAMPTON: Objection to the form.

2 THE WITNESS: Well, you -- I mean, you -- you  
3 began this by speaking of -- well, I told you that  
4 there was a study on Air Force cadets and part of  
5 that was push-up. So that's a -- and -- and these 12:57:26  
6 are -- these proxies are accepted proxies for what  
7 we're talking about, so...

8 BY MR. BLOCK:

9 Q So I -- just the answer to my question --

10 A The answer to your question is -- is that 12:57:41  
11 there have been studies looking at the effect of  
12 testosterone suppression in transgender individuals  
13 on measures of strength and power, lean mass.

14 Q On -- on proxies for those things; correct?

15 A Yes. Accepted proxies. Noncontroversial 12:58:03  
16 proxies.

17 Q So in -- let's look at paragraph 90 of your  
18 report.

19 A Okay.

20 Q Paragraph 90 says (as read): 12:58:43

21 "In addition, multiple studies have  
22 found that testosterone suppression  
23 may modestly reduce, but not does  
24 not come close to eliminating the  
25 male advantage in muscle mass and 12:58:56

1 lean body mass, which together  
2 contribute to the greater average  
3 male weight. Researches looking at  
4 transitioning adolescents found that  
5 the weight of biological male 12:59:05  
6 subjects increased rather than  
7 decreased after treatment with an  
8 antiandrogen testosterone  
9 suppressor."

10 Did I read that right? 12:59:15

11 A Yes.

12 Q Okay. So -- and then you cite to a study by  
13 Tack in 2018; correct?

14 A Correct.

15 Q Okay. So did the Tack study find that after 12:59:30  
16 taking antiandrogen testosterone suppressor, the  
17 transgender subjects's muscle mass and lean body  
18 mass increased?

19 A I believe that the Tack study looked at  
20 several things, one of which was grip strength, and 12:59:58  
21 found that grip strength did not decrease.

22 Q So that's not my question. My question is,  
23 did the Tack study find that muscle mass and lean  
24 body mass increased?

25 A I believe that muscle mass helps stabl- -- 01:00:18

1 I'd have to go back and look at that.

2 Can I see my report?

3 Q Your report is there --

4 A I'm sorry, I -- I'd have to go back and --

5 and -- and reference that, but -- 01:00:42

6 Q Okay. Well --

7 A I can't recall.

8 Q Okay. So this first sentence in paragraph 90  
9 talks about how testosterone suppression doesn't  
10 come close to eliminating the male advantage in 01:00:52  
11 muscle mass and lean body mass; correct?

12 That's what the first sentence talks about?

13 A Correct.

14 Q All right. And the second sentence says that  
15 the Tack study found that the weight of biological 01:01:06  
16 male subjects increased rather than decreased;  
17 correct?

18 A Correct.

19 Q So is it a fair inference from the first  
20 sentence, followed by the second sentence, that 01:01:21  
21 you're implying here that what increases was muscle  
22 mass and lean body mass?

23 MR. FRAMPTON: Objection --

24 THE WITNESS: No --

25 MR. FRAMPTON: -- to the form. 01:01:32

Page 166

1 Go ahead.

2 THE WITNESS: No, I'm not trying to imply  
3 that.

4 BY MR. BLOCK:

5 Q You're not trying to imply that. 01:01:38

6 So then why is it relevant that the weight  
7 increased?

8 A Well, lean body mass -- where lean body mass  
9 settles is relevant. That's one thing. But overall  
10 weight of the individual, again, within an injury 01:01:58  
11 model, matters, too.

12 Q Sure. But in this paragraph -- so the first  
13 sentence discusses muscle mass and lean body mass;  
14 correct?

15 A Correct. 01:02:11

16 Q And then the second sentence mentions the  
17 Tack study; correct?

18 A Well, I -- I would say that the first  
19 sentence speaks to the advantage in muscle mass and  
20 lean body mass, and then it references to average 01:02:24  
21 male weight. So all three are referenced there.

22 Q Okay. And the second sentence talks about  
23 the Tack study; correct?

24 A Correct.

25 Q And then the third sentence talks about a 01:02:35

Page 167



1 Harper study and talks about their lean body mass  
2 and muscle area; correct?

3 A That -- that is a -- the Harper references to  
4 a -- a review paper.

5 Q Okay. But the -- 01:03:03

6 A So -- yeah, so I'd have to go back and look  
7 at that review paper to see what the original  
8 citation is that that's referencing.

9 Q Sure. But in your paragraph 90, the first  
10 sentence, the third sentence and the fourth sentence 01:03:23  
11 refer to muscle mass or muscle area or lean body  
12 mass; right?

13 MR. FRAMPTON: Objection to the form.

14 Go ahead.

15 THE WITNESS: Which sentences again? 01:03:41

16 BY MR. BLOCK:

17 Q The first, the third and the fourth.

18 A The first sentence refers to muscle mass,  
19 lean body mass and -- and average weight. The third  
20 references lean body mass and muscle area. 01:04:01

21 And you said the fourth?

22 Q Yep.

23 A References muscle area.

24 Q Do any of those sentences reference fat?

25 A Well, they do indirectly, when you're 01:04:27

Page 168

1 referring to lean body mass and shifts in lean body  
2 mass.

3 Q Do they do -- do they do directly, reference  
4 fat?

5 MR. FRAMPTON: Object to the form. 01:04:47

6 Go ahead.

7 THE WITNESS: They do not directly. They do  
8 indirectly.

9 MR. BLOCK: So if you look in your exhibit  
10 folder, I'm going to mark this Exhibit 83. It 01:04:56  
11 should soon appear.

12 (Exhibit 83 was marked for identification  
13 by the court reporter and is attached hereto.)

14 BY MR. BLOCK:

15 Q Let me know when it's up. 01:05:16

16 A It's up. I'm just looking to see if I can  
17 zoom this. Right here.

18 Okay.

19 Q Is -- is this the Tack study that you're  
20 referring to? 01:05:37

21 A Yes.

22 Q Okay. If you can turn to page 2151 of the  
23 study.

24 A Okay.

25 Q Okay. If you look in the second -- in the 01:06:07

1 right column, you know, the first full paragraph,  
2 it -- it says (as read):

3 "Trans girls treated with CA showed  
4 a significant increase in fat mass  
5 (Figure 1D) and decrease in lean 01:06:22  
6 mass (Figure 1C), resulting in an  
7 increased body fat percentage,  
8 without changes in total mass."

9 Did I read that right?

10 A Yes. 01:06:34

11 Q Okay. So according to the summary, was there  
12 actually an increase in -- in total mass for these  
13 trans girls?

14 MR. FRAMPTON: Object to the form.

15 Go ahead. 01:07:04

16 THE WITNESS: Can I have a minute to look at  
17 this paper?

18 BY MR. BLOCK:

19 Q Yeah, sure.

20 A Thanks. 01:07:17

21 Reference weight before hormonal therapy  
22 averaged 63.7 kilograms; afterwards, averaged  
23 66.3 kilograms.

24 Q So what do you interpret to be the -- what --  
25 what do you think -- what do you interpret the 01:08:34

Page 170

1 sentence we just read to refer to when it says  
2 "without changes in total mass"?

3 A That's speaking to a shift in -- you -- you  
4 are correct that there is no change in body weight  
5 associated with that statement. 01:09:21

6 Q Okay. And so this -- did this study find  
7 that -- that muscle mass in the transgender girls  
8 actually increased?

9 A Well, one of the -- the changes in lean body  
10 mass in this study were negative. 01:10:36

11 Q Okay. The study --

12 A But we don't know where they settled compared  
13 to a cisgender population because it wasn't  
14 analyzed.

15 Q Okay. 01:10:51

16 A We do know that grip strength didn't change.

17 Q How -- is increase in fat generally  
18 associated with enhanced athletic performance?

19 A In the conte- -- it can be with -- as a --  
20 energy stored, but in the context of this, no. 01:11:24

21 Q Okay. On grip strength -- let's look further  
22 down in that paragraph we were reading from, on page  
23 2151.

24 A Uh-huh.

25 Q So this is the -- the beginning of the final 01:11:38

1 sentence.

2 Do you see that?

3 A Yes, I do.

4 Q So it says (as read):

5 No significant changes in grip 01:11:47

6 strength were observed in trans

7 girls during the study period,

8 resulting in decreased Z scores

9 compared with the -- compared with

10 age-matched peers of the same gender 01:11:57

11 recorded at birth.

12 Do you see that?

13 A I do.

14 Q What does that mean, by negative Z scores?

15 A That's a comparison of your score to 01:12:04

16 age-matched norms.

17 Q Okay. So in -- in context, does this mean

18 that compared to -- that the cisgender boys that

19 these subjects are being compared to continue to

20 increase their grip strength while the grip strength 01:12:27

21 of the transgender girls remained flat?

22 A Yes, that's accurate.

23 Q Okay. So the -- the use -- suppressing

24 testosterone had an effect on the ability to

25 increase grip strength; correct? 01:12:47

1 MR. FRAMPTON: Object to the form.

2 THE WITNESS: In this case, yes.

3 BY MR. BLOCK:

4 Q Okay. If we can go to page 55, bottom of

5 paragraph 95. 01:13:13

6 A Are we back on my report?

7 Q Yeah, we are. Thanks.

8 A Page 55, paragraph what?

9 Q 95. So the -- the -- the bottom half of the  
10 paragraph that's, you know, continuing. 01:13:37

11 A Okay.

12 Q So -- so let's go just from the middle of  
13 that paragraph.

14 Do you see "the important point to make"? Do  
15 you see where you write that? 01:13:53

16 A I do.

17 Q Okay. So you write (as read):

18 "The important point to make is that  
19 the only effect strength training  
20 could have on these athletes is to 01:13:59  
21 counteract and reduce the limited  
22 loss of muscle mass and strength  
23 that does otherwise occur to some  
24 extent over time with testosterone  
25 blockade. There has been at least 01:14:10

Page 173

one study that illustrates this, although only over a short period, measuring strength during a twelve-week period where testosterone was suppressed to levels of 2 nmol/L. During that time, subjects actually increased leg lean mass by 4% and total lean mass by 2%, and subject performance on the 10 rep max leg press improved by 32%, while their bench press performance improved by 17%."

13                   And you cite to -- to Kvorning, K-V-O-R-N-I  
14                   N-G, 2006; right?

15	A Correct.	01:14:47
----	------------	----------

16 Q Okay. So do you -- do you recall what this  
17 study -- this Kvorning study was analyzing?

18           A    I believe that it was analyzing  
19   non-transgender subjects who were -- (technical  
20   difficulty). 01:15:18

21 MR. FRAMPTON: Sorry, he did answer --

22 THE WITNESS: Did you hear me?

23 MR. FRAMPTON: -- the question. Did it not  
24 come through?

25 MR. BLOCK: It didn't come through. 01:15:22

1 MR. FRAMPTON: I'm sorry.

2 Answer it again.

3 THE WITNESS: I -- I said I believed that it  
4 refers to non-transgender subjects who underwent  
5 hormonal suppression. 01:15:30

6 BY MR. BLOCK:

7 Q Okay. And are -- does it -- are those  
8 non-tran- -- are those non-transgender subjects  
9 compared to a -- a different group, a control group  
10 of any kind? 01:15:39

11 A I -- I don't recall. I'd have to go back and  
12 look.

13 Q Okay. Let's do that. I -- I have it already  
14 for you.

15 MR. FRAMPTON: Sorry, I'm just going to tilt 01:15:59  
16 his screen a little bit. It looks like his chin is  
17 getting cut off. I can't tell if that's just on my  
18 screen or -- or not.

19 MR. BLOCK: No, it's -- it's on -- it's on  
20 mine, too. 01:16:09

21 MR. FRAMPTON: Okay.

22 MR. BLOCK: Thank you.

23 (Exhibit 84 was marked for identification  
24 by the court reporter and is attached hereto.)

25 MR. BLOCK: So popping up in your exhibit 01:16:16

Page 175



1 files should be a -- a document marked Exhibit 84.

2 THE WITNESS: Okay.

3 BY MR. BLOCK:

4 Q Let me know when it's there.

5 A I have it. 01:16:36

6 Q Okay. Okay. And so this document is titled

7 "Suppression of endogenous testosterone production

8 attenuates the response to strength training: a

9 randomized, placebo-controlled, and blinded

10 intervention study." 01:16:55

11 Did I read that right?

12 A You did.

13 Q And this is the study you were citing to;

14 correct?

15 A Correct. 01:17:01

16 Q And, you know, randomized,

17 placebo-controlled, and blinded is pretty much

18 the -- the best a study can be, right? That's, you

19 know, the gold standard, isn't it?

20 MR. FRAMPTON: Object to the form. 01:17:11

21 Go ahead.

22 THE WITNESS: Well, yeah, double blinded

23 would be the gold standard, but yes.

24 BY MR. BLOCK:

25 Q Good point. 01:17:18

1 And so just reading from the -- the abstract  
2 a little bit, if you go, you know, five lines down  
3 from the abstract, it says (as read):

4 "We hypothesized that suppression of  
5 endogenous testosterone would 01:17:31  
6 inhibit the adaptations to strength  
7 training in otherwise healthy men."

8 Right?

9 A Right.

10 Q And so tell me if my description of what 01:17:47  
11 happened is right. You know, they -- they took two  
12 groups of, you know, cisgender men, and for one  
13 group, they suppressed their testosterone, and then  
14 they had both groups undergo a strength-training  
15 period of eight weeks; is that right? 01:18:07

16 A Correct.

17 Q Okay. And then they compared the two groups;  
18 right?

19 Is that right?

20 A I -- I want to make sure I'm answering you 01:18:27  
21 correctly, so give me a minute.

22 Q Fair. I just wanted to make sure.

23 A Yeah, so -- just so that I'm clear, can you  
24 restate your question again?

25 Q Yeah. So, you know, after having the two 01:19:14

Page 177

1 groups undergo this period of strength training,  
2 they then compared the results of the two groups;  
3 right?

4 A Yes.

5 Q Okay. If we can just look at -- if we can 01:19:29  
6 just look at page E1329. Let me know when you're  
7 there.

8 A Go ahead.

9 Q Okay. So if you look at the paragraph  
10 beginning -- so the final paragraph on this page, on 01:20:08  
11 1329, it says (as read):

12 "The placebo group adapted to the  
13 strength training period by  
14 significantly larger increases in  
15 both lean leg mass and isometric 01:20:18  
16 strength. Although those in the  
17 goserelin group were able to have  
18 the same progression in training  
19 load as those in the placebo group,  
20 they did not gain muscle mass or 01:20:31  
21 increased isometric strength in the  
22 laboratory test."

23 Right?

24 A That's what that says.

25 Q Okay. And then if we can just go to the -- 01:20:38

1 well, let's just -- I'll ask you questions about  
2 that.

3 So the -- the -- tell me if I'm wrong about  
4 this, but the study, you know, seems to support an  
5 argument that reducing circulating testosterone 01:20:55  
6 affects a biological male's ability to increase  
7 muscle mass and strength. Is that a fair -- in  
8 response to training. Is that a fair statement?

9 MR. FRAMPTON: Object to the form.

10 Go ahead. 01:21:18

11 THE WITNESS: I would say that it -- it does  
12 show that the effects -- that it does affect the  
13 ability to improve strength training, yes.

14 BY MR. BLOCK:

15 Q And so when -- when athletes -- 01:21:33

16 A I would say affects, not eliminate, but...

17 Q Okay. When -- when athletes train for  
18 athletic competitions, they engage in new strength  
19 training; right?

20 A Depending on the sport, yes. 01:21:55

21 Q Okay. So is it -- so -- yeah, I understand  
22 that -- you know, that your report talks about the  
23 ability of suppressing testosterone to reduce muscle  
24 and strength that's already been acquired, but does  
25 your report address the effects of lowering 01:22:17

1 testosterone on the ability of someone to build new  
2 strength and muscle?

3 MR. FRAMPTON: Object to the form.

4 THE WITNESS: Yeah, can I go back to my

5 report to answer that?

01:22:32

6 BY MR. BLOCK:

7 Q Yes, sure.

8 A I'm back on page 55, if you want to go there.

9 Q Of your report?

10 A Yes. Where -- where you started.

01:23:02

11 Q Yeah.

12 A So -- and I'm sorry, restate your question  
13 one more time.

14 Q Sure. Does your report address the effects  
15 of suppressing testosterone on an -- on an athlete's  
16 ability to -- to acquire new increases in mass and  
17 strength?

01:23:16

18 MR. FRAMPTON: Objection to the form.

19 Go ahead.

20 THE WITNESS: I think it speaks to it here.

01:23:31

21 It doesn't speak to the degree to which it affects  
22 it, but it -- what this study says is that gains are  
23 feasible.

24 BY MR. BLOCK:

25 Q Sure. Does -- does this study compare the

01:23:46

Page 180

1 amount of gains that a cisgender man who's lowered  
2 testosterone would have to the gains that a  
3 cisgender woman would have?

4 A No, the study looked at men.

5 Q All right. So we -- we don't really have a 01:24:04  
6 basis to -- to know one way or the other whether a  
7 cisgender woman receiving the same strength training  
8 would have increases in -- in muscle mass that are  
9 greater or less than the increases that the  
10 cisgender men who lowered testosterone had; right? 01:24:27

11 A Well, I think what's relevant to the  
12 discussion is that a cisgender male can enter into a  
13 strength training program at the time that hormonal  
14 therapy has started.

15 That male, in many cases, will already have 01:24:43  
16 retained differences in lean muscle mass and  
17 strength when comparing to a cisgender female  
18 population.

19 And rather than come in -- (technical  
20 difficulty) -- they have the capability of coming in 01:24:58  
21 higher.

22 So I think that's the relevant comparison.

23 Q And you said in many cases they would have  
24 muscle mass that's greater than the cisgender  
25 female, but if they don't already have that muscle 01:25:06

1 mass, then they will have a harder time acquiring it  
2 than they otherwise would have had; right?

3 MR. FRAMPTON: Objection --

4 THE WITNESS: I didn't say that.

5 MR. FRAMPTON: -- to the form. 01:25:20

6 Go ahead.

7 BY MR. BLOCK:

8 Q I'm saying that. I'm asking that.

9 You know, you said that in many cases, a -- a  
10 cisgen- -- a transgender girl will have entered into 01:25:27  
11 a tournament already having acquired certain muscle  
12 mass.

13 And so my question is about, you know, people  
14 who lowered testosterone, you know, before, you  
15 know, acquiring any muscle mass and the effects that 01:25:48  
16 lowering testosterone would have on their ability to  
17 acquire it.

18 A That doesn't --

19 MR. FRAMPTON: Objection to the form.

20 THE WITNESS: -- have anything to do with 01:25:59  
21 what we're talking about. We're talking about --  
22 you brought up the issue of whether or not  
23 individuals who enter into a strength-training  
24 program at the time that they are starting hormonal  
25 therapy gain ground or not. 01:26:12

Page 182

1           And that study showed that -- that you can  
2       gain ground, and it was done in a male population,  
3       the applicably of -- applicability of which, to this  
4       conversation, is that those males can then, in turn,  
5       cross over into a female sport when they now have       01:26:27  
6       greater lean muscle mass than they had before they  
7       started, and they already had a retained advantage.

8           I'm not sure --

9       BY MR. BLOCK:

10       Q     The study is about cisgender men who have       01:26:44  
11       already completed puberty; right?

12       A     Again, I would have to go back and look at  
13       the age range of the study, but I believe that  
14       that's true.

15       Q     All right. So transgender girls who       01:26:55  
16       transition before completing puberty will not have  
17       the same amount of muscle mass as a cisgender man  
18       who has completed puberty; right?

19       MR. FRAMPTON: Object to the form.

20       THE WITNESS: Say -- say that one more time.       01:27:14

21       BY MR. BLOCK:

22       Q     Do people --

23       A     Transgender girls who have not -- what did  
24       you say?

25       Q     Who have not completed puberty do not have       01:27:20



1 the same amount of muscle mass as cisgender men who  
2 have completed puberty; right?

3 A I'll grant you that. Yes, that's true.

4 Q Okay. So lowering testosterone, according to  
5 the study, has an effect on their ability to 01:27:34  
6 accumulate new muscle mass; right?

7 A Well, you -- you left that study. We're no  
8 longer talking about that study. I can't speak to  
9 the applicability of that study on the scenario that  
10 you just gave. They're two different things. 01:27:53

11 Q Okay. So you -- you can't -- you can't speak  
12 to the applicability of studies on the effects of  
13 lowering circulating testos- -- circulating  
14 testosterone on transgender girls who have not  
15 completed puberty? 01:28:07

16 A That's not what I said. I said I can't speak  
17 to the applicability of the study you raised to the  
18 scenario that you then went to.

19 Q Why not?

20 A Because this study is looking at the effects 01:28:17  
21 of strength training in men who are transitioning.

22 Q So why is it relevant to this report?

23 A This report, what do you mean?

24 MR. FRAMPTON: Object to the form.

25 ///

1 BY MR. BLOCK:

2 Q I mean, you're -- you're discussing the study  
3 because it has -- you think it has some relevance to  
4 the participation of transgender women; right?

5 A Yes. I spoke to that already. 01:28:52

6 Q Okay. Do you think it has relevance only to  
7 the participation of transgender women who have  
8 completed puberty, or does it also have relevance to  
9 the participation of transgender women who received  
10 puberty blockers or hormones before completing 01:29:04  
11 puberty?

12 MR. FRAMPTON: Object to the form.

13 THE WITNESS: The -- the study wasn't  
14 designed to look to that group, so I have no way to  
15 speak to that. And that study hasn't -- and that 01:29:16  
16 has not been looked at.

17 BY MR. BLOCK:

18 Q So -- so you don't think it's relevant to the  
19 participation of transgender girls and women who  
20 have not completed puberty; right? 01:29:24

21 MR. FRAMPTON: Object to the form.

22 THE WITNESS: I didn't say that. You did.

23 BY MR. BLOCK:

24 Q So -- so is it -- is it relevant or isn't it,  
25 to -- to girls -- participation of girls and women 01:29:32

Page 185

1 who are transgender who have not completed puberty?

2 A So --

3 MR. FRAMPTON: Same objection.

4 THE WITNESS: -- I'm a little bit

5 uncomfortable with the assumptions that I've got to 01:29:43

6 make to answer that question, but to step out of

7 what you're saying and say in theory, is this study

8 applicable to prepubertal kids who are entered into

9 a strength-training program at the time that they

10 start hormonal manipulation, possibly. 01:30:03

11 MR. FRAMPTON: We're at -- we're at 1:30

12 here. I think that we probably would like to do a

13 lunch break sometime soon, but I'm not -- I'm not

14 telling you you've got to do that now, by any

15 stretch, if you were trying to complete a line of 01:30:28

16 questioning or something.

17 MR. BLOCK: Yeah -- yeah, I would. Just give

18 me ten more minutes, and then we can take a break.

19 MR. FRAMPTON: Yeah.

20 MR. BLOCK: Is that okay with you, 01:30:40

21 Dr. Carlson?

22 THE WITNESS: Yeah, that's fine.

23 Can I have 30 seconds just to pop some food

24 in my mouth? Is that all right?

25 MR. BLOCK: Sure. Can we go off the record 01:30:49

1 for 30 seconds?

2 THE VIDEOGRAPHER: We are off the record at  
3 1:31 p.m.

4 (Recess.)

5 THE VIDEOGRAPHER: We are on the record at 01:31:34  
6 1:32 p.m.

7 MR. BLOCK: Great. Thank you.

8 THE VIDEOGRAPHER: Central Time. Sorry,  
9 Central Time.

10 BY MR. BLOCK: 01:31:57

11 Q If you go to page 54, near the end of  
12 paragraph 93.

13 A Back on my report?

14 Q Yeah.

15 A 54, paragraph what? 01:32:13

16 Q 93. So at the very end, paragraph 93.

17 When you're discussing this Lapauw 2008 and  
18 Hilton 2021 study, you say -- this is like five  
19 paragraphs from the bottom -- (as read):

20 "The authors also noted that since 01:32:32

21 males who identify as women often

22 have lower baseline (i.e., before

23 hormone treatment) muscle mass than

24 the general population of males..."

25 And then it continues, but I -- 01:32:44

Page 187

1           A     Sorry, I was -- I was trying to find my place  
2     when you started reading, so I'm -- I'm on that page  
3     now.

4           Q     Sure. Do you -- okay.

5                     So about five lines from the bottom of                     01:32:53  
6     paragraph 93, you say -- in -- when discussing this  
7     Hilton study, you say (as read):

8                     "The authors also noted that since  
9                     males who identify as women often  
10                    have lower baseline (i.e., before                     01:33:09  
11                    hormone treatment) muscle mass than  
12                    the general population of males..."

13                    And then the sentence continues, but I just  
14     want to ask you a question about this part where you  
15     say that the authors of the study noted that males             01:33:23  
16     who identify as women often have lower baseline  
17     muscle mass than the general population of males.

18                    So do you -- do you have any reason to  
19     disagree with them, that -- that transgender women  
20     often have lower baseline muscle mass than the             01:33:44  
21     population of cisgender males?

22           A     No. I think there are -- a fair read of  
23     studies that do exist says that in many cases  
24     transgender -- I'm going to use your term --  
25     transgender females come into baseline with some             01:34:03

1 lower measures of lean muscle mass and -- but the  
2 relevant -- and so the relevant question is where do  
3 they fall related to cisgender females, but to your  
4 point.

5 Q So the -- so my -- so my question is, do -- 01:34:25  
6 so by lowering their levels of circulating  
7 testosterone, that would affect their ability to  
8 acquire new muscle mass like at the same rate as a  
9 cisgender male; correct?

10 MR. FRAMPTON: Objection to the form. 01:34:48

11 THE WITNESS: Their -- their ability to  
12 acquire lean muscle mass at the same rate as a  
13 representative cisgender male population would be --  
14 studies show that it would show less, yes.

15 Is that what you were asking? 01:35:18

16 BY MR. BLOCK:

17 Q Yeah, I was asking whether or not lowering  
18 their circulating testosterone would impair their  
19 ability to increa- -- to develop new muscle mass at  
20 the same rate as a cisgender male who is -- has 01:35:29  
21 regular levels of circulating testosterone.

22 A At the same rate, yes.

23 Q And do you know how -- whether -- do you know  
24 what the effects of lowering testosterone has on  
25 a -- a transgender woman's ability to acquire new 01:35:48

1 muscle mass compared to how quickly a cisgender  
2 woman can acquire new muscle mass?

3 MR. FRAMPTON: Object to the form.

4 Go ahead.

5 THE WITNESS: Restate that question. 01:36:06

6 BY MR. BLOCK:

7 Q Yeah, sure. So I -- do you -- do you -- are  
8 you aware of any data comparing the ability of a  
9 transgender woman who's lowered circulating  
10 testosterone to acquire new muscle mass against the 01:36:20  
11 ability of a cisgender woman to acquire new muscle  
12 mass?

13 MR. FRAMPTON: Same objection.

14 Go ahead and answer.

15 THE WITNESS: This comparison to cisgender 01:36:30  
16 women, trying to think of a specific study. Wiik.

17 I'd have to look at -- I'd have to go back  
18 and look at my references.

19 Q Sure.

20 MR. BLOCK: Okay. We can take a break for -- 01:37:07  
21 for lunch now. Let's go off the record.

22 THE VIDEOGRAPHER: We are off the record at  
23 1:37 p.m., Central Time.

24 (Lunch recess.)

25 THE VIDEOGRAPHER: We are on the record at 02:15:44

1 2:16 p.m., Central Time.

2 BY MR. BLOCK:

3 Q Good afternoon, Dr. Carlson.

4 A Hello.

5 Q I'd like to direct your attention to 02:15:54

6 Exhibit 80, so your February 2022 report, on

7 page 15. Let me know when you're there.

8 A Okay. I am on page 15.

9 Q Okay. And if you can look at footnote 10.

10 A Okay. 02:16:38

11 Q Are you there?

12 A I -- I said, "Okay." I'm sorry.

13 Q Okay. So in the footnote, you know, it says

14 (as read):

15 In some cases, safety requires even 02:16:49

16 further division or exclusion. A

17 welterweight boxer would not compete

18 against a heavyweight, nor a

19 heavyweight wrestle against

20 smaller -- a smaller athlete. In 02:16:59

21 the case of youth sports, when

22 children are at an age where growth

23 rates can vary widely, leagues will

24 accommodate for naturally-occurring

25 large discrepancies in body size by 02:17:10

Page 191



1 limiting larger athletes from  
2 playing positions where their size  
3 and strength is likely to result in  
4 injury to smaller players. Thus, in  
5 youth football, players exceeding a 02:17:21  
6 certain weight threshold may be  
7 temporarily restricted to playing on  
8 the line and disallowed from  
9 carrying the ball, or playing in the  
10 defensive secondary, where they 02:17:32  
11 could impose high-velocity hits on  
12 smaller players.

13 Did I read that correctly?

14 A Yes, you did.

15 Q Okay. Great. So, you know -- so my question 02:17:39  
16 is, this is an example of a way to improve safety  
17 even within a team solely consisting of boys or  
18 solely consisting of girls; correct?

19 A Correct.

20 Q Okay. 02:18:09

21 A I mean, it doesn't all speak to team sports,  
22 but yes.

23 Q Okay. Now, would this also be a way to  
24 increase safety in a coed team?

25 A That does occur in some coed rec sports, yes. 02:18:18

1 Q Okay. So there are ways to make rule  
2 modifications to account for safety concerns without  
3 completely excluding certain members of the team?

4 MR. FRAMPTON: Object to the form.

5 THE WITNESS: The way that you -- the -- the 02:18:35  
6 type of changes that we're talking about can be  
7 made, but they alter the nature of the sport itself,  
8 so... You -- you cannot do it without changing the  
9 essence of what the sport is.

10 BY MR. BLOCK: 02:19:07

11 Q So if --

12 A Whether that's acceptable or not acceptable,  
13 that's not really what I was retained for.

14 Q Okay. So if we could go to paragraph 42.

15 A Okay. 02:19:35

16 Q All right. So if you go to the second  
17 sentence, where it says "this is one reason."

18 Do you see that?

19 A I'm reading the first, so just give me a  
20 second. 02:19:47

21 I see it.

22 Q Okay. So you see "This is one reason that  
23 rule modifications often exist in leagues where coed  
24 participation occurs." And then for footnote 14,  
25 you say, "For example, see" this website "(detailing 02:20:08

1 variety of rule modifications applied in co-ed  
2 basketball)." And then you say, "Similarly, coed  
3 soccer leagues often prohibit so-called 'slide  
4 tackles,' which are not prohibited in either men's  
5 or women's soccer." 02:20:28

6 Do you see those sentences?

7 A I do.

8 Q Okay. And so, again, would it be possible to  
9 make similar rule modifications if a transgender  
10 participant is playing? 02:20:39

11 MR. FRAMPTON: Object to the form.

12 Go ahead.

13 THE WITNESS: Can -- you can change a  
14 sport -- you can change the rules of the sport any  
15 way you want, but you can't do that without changing 02:20:50  
16 the essence of the sport.

17 BY MR. BLOCK:

18 Q Okay. But are these rule changes for these  
19 coed participation sports adequate, in your opinion,  
20 to minimize safety concerns? 02:21:05

21 MR. FRAMPTON: Object to the form.

22 THE WITNESS: I'm not sure I can speak to  
23 adequate or not. That implies that safety  
24 guardrails can -- that there's an end to it, but --  
25 restate your question, I'm sorry. 02:21:36

1 BY MR. BLOCK:

2 Q I said, are these rule changes that you  
3 discuss in footnote 14, in your opinion, adequate --  
4 adequate to minimize safety risks from coed  
5 participation?

02:21:54

6 MR. FRAMPTON: Object to the form.

7 THE WITNESS: I believe that they -- I -- I  
8 would assume that in the leagues that use them, that  
9 they serve the purpose of risk reduction in those  
10 leagues. Not total risk reduction, relative risk 02:22:36  
11 reduction.

12 BY MR. BLOCK:

13 Q Is it ever possible to totally eliminate risk  
14 from participating in contact or collision sports?

15 A No, of course not. 02:22:45

16 Q But --

17 A Well, yes. By not playing.

18 Q Okay. So -- but -- so do you think sports  
19 should be eliminated to eliminate the possibility of  
20 risk? 02:23:01

21 MR. FRAMPTON: Object to the form.

22 THE WITNESS: Well, that's -- that's a  
23 societal -- that's not why I was retained for this.  
24 I was retained to speak to safety issues as exist in  
25 sport, not whether a sport ought to continue. 02:23:20

Page 195

1 BY MR. BLOCK:

2 Q What -- do you think there's safety risks  
3 involved when a -- a cisgender high school girl  
4 competes at -- competes on a football team with  
5 cisgender boys?

02:23:46

6 A Do I think that there are risks? Is that  
7 what you said?

8 Q Are there risks to that cisgender girl.

9 A Well, if -- if -- if we're going to say that  
10 there -- sports is not a zero sum risk, then any  
11 participation involves some risk.

02:23:59

12 Q Okay. Well, do you think it's safe for a  
13 high school girl to play tackle football with a high  
14 school boy?

15 MR. FRAMPTON: Object to the form.

02:24:16

16 THE WITNESS: You want to specify that  
17 question more or just leave it the way it is?

18 BY MR. BLOCK:

19 Q I want -- do you think it's safe for a high  
20 school girl to play tackle football with a high  
21 school boy?

02:24:29

22 MR. FRAMPTON: Same objection.

23 Go ahead.

24 THE WITNESS: I think that there is  
25 heightened risk for a high school girl to play

02:24:36

Page 196

1 football with a high school boy; however, there's a  
2 couple of things to say about that.

3 First of all, that individual can select  
4 certain positions that are going to reduce the risk  
5 more than others. So, for instance, you might have 02:24:55  
6 somebody who kicks the ball off, who -- (technical  
7 difficulty).

8 Second, in that case, it's an individual  
9 choosing to participate and assuming that risk.

10 But as to whether there is risk, yeah, 02:25:15  
11 there's risk.

12 BY MR. BLOCK:

13 Q Are you able to compare that risk to the risk  
14 of 11-year-old boys and girls playing soccer  
15 together? 02:25:27

16 MR. FRAMPTON: Object to the form.

17 THE WITNESS: Am I able to compare the risk  
18 of a high school female playing football on a men's  
19 team with 11-year-old boy and girls playing soccer  
20 together? Is that what you're asking? 02:25:48

21 BY MR. BLOCK:

22 Q That's what I'm asking.

23 MR. FRAMPTON: Same objection.

24 THE WITNESS: That's not something that's  
25 been looked at. 02:25:57

1           If you're asking me whether there's a general  
2       increase in risk, I would say yes.

3       BY MR. BLOCK:

4           Q     An increase in risk for the football fact  
5       pattern? 02:26:13

6           MR. FRAMPTON: Object to the form.

7           THE WITNESS: That's not what you asked.

8       BY MR. BLOCK:

9           Q     Well, I'm just trying to understand what you  
10      said at the end. 02:26:19

11           You said, If you're asking if it's a general  
12      increase in risk, I'd say yes.

13           I just wanted to just clarify what you were  
14      referring to at the end.

15           A     I'm not sure what you were asking. So you 02:26:29  
16      were asking whether --

17           Q     What's -- what's -- sorry, I -- I can clarify  
18      my question. Would that help?

19           A     Yes, I think so.

20           Q     Yeah, what's riskier, an 11-year-old girl 02:26:40  
21      playing soccer with an 11-year-old boy or a  
22      17-year-old girl playing football with a 17-year-old  
23      boy?

24           A     Well, that's anecdote and --

25           MR. TRYON: Objection. 02:26:56

1 BY MR. BLOCK:

2 Q Go on.

3 MR. TRYON: Go ahead.

4 THE WITNESS: Me? Okay.

5 That's anecdote. And it's obviously going to 02:27:06  
6 depend on this situation.

7 If you're comparing a high school placekicker  
8 and that's all she does to two 11-year-olds where  
9 there's wide discrepancy between a larger, faster  
10 male and a smaller, slower female, then there's 02:27:28  
11 going to be more risk in the soccer side of it. If  
12 you're comparing a high school female who's playing  
13 linebacker, the risk might fall to the other side.  
14 But those are hypotheticals around, again,  
15 anecdotes, so... 02:27:51

16 BY MR. BLOCK:

17 Q Isn't this whole -- isn't your expert report  
18 all about hypotheticals and anecdotes?

19 MR. FRAMPTON: Object to the form.

20 THE WITNESS: I wouldn't say that they're 02:28:03  
21 about anecdotes. I would say that it's based on  
22 modeling assumptions that -- informed by research  
23 that speaks to a sex-based difference.

24 BY MR. BLOCK:

25 Q And those same modeling assumptions would 02:28:24

Page 199



1 allow you to compare the risks of 11-year-olds  
2 playing soccer together to 17-year-olds playing  
3 football together; right?

4 MR. FRAMPTON: Object to the form.

5 THE WITNESS: To your point, I look at -- 02:28:44  
6 yes, the -- the -- the modeling risks apply to many  
7 different age categories.

8 BY MR. BLOCK:

9 Q Is there any data at all on injuries to  
10 cisgender prepubertal girls from playing with 02:29:09  
11 cisgender prepubertal boys?

12 A I'm not aware of that specifically, no.

13 Q On page -- paragraph 78. Let me know when  
14 you're at paragraph 78.

15 A Okay. 02:30:09

16 Q Okay. Paragraph 78, you say (as read):

17 "Of course there exists variation in

18 all these factors within a given

19 group of males or females. However,

20 it is also true that within 02:30:17

21 sex-specific pools, size

22 differential is somewhat predictable

23 and bounded, even considering

24 outliers."

25 Did I read that right? 02:30:25

Page 200

1 A Yes.

2 Q Okay. So I think this goes back a little bit  
3 to our discussion from -- from before, having a  
4 larger cisgender woman on a girls' -- a woman's  
5 sports team is riskier to the other participants 02:30:43  
6 than having a smaller cisgender woman on that team;  
7 correct?

8 A I don't -- you're equating size to risk in a  
9 way that make it hard to answer that question. You  
10 haven't told me the sport. You haven't told me the 02:31:18  
11 other characteristics of the athletes. So it could  
12 run either way.

13 Injury risk is a net effect. You could have  
14 a -- well, I'll just leave it at that.

15 Q Okay. So you say size differential here, so 02:31:37  
16 that's why I talked about size.

17 When you -- when you said it's also true that  
18 within sex-specific pools, size differential is  
19 somewhat predictable.

20 What point were you making when you said 02:31:51  
21 that?

22 A I -- I -- I suppose a more artful way to say  
23 that would be physical attributes are somewhat --  
24 or -- or performance-based attributes -- physical  
25 and performance attributes are somewhat predictable 02:32:35

1 and bounded.

2 Q And so your concern about allowing  
3 transgender women to participate on women's teams is  
4 that you would be introducing athletes into the pool  
5 that fall outside of the outer bounds that would 02:32:50  
6 exist if it were just limited to cisgender women  
7 athletes?

8 MR. FRAMPTON: Objection --

9 THE WITNESS: It --

10 MR. FRAMPTON: -- to form. 02:33:04

11 BY MR. BLOCK:

12 Q Go ahead.

13 A My concern would be that in -- in the  
14 aggregate, there are more than any one -- there's  
15 more than any one attribute that makes up a male, 02:33:12  
16 and that taken as a whole, those attributes fall  
17 outside the bounds of -- into the other pool.

18 Q And is that going to be true for every  
19 transgender woman?

20 A I can't speak to how that would apply to any 02:33:38  
21 given -- (technical difficulty) -- but from a  
22 population standpoint, it would certainly hold true.

23 Q So what if eligibility were limited to  
24 transgender women whose physical attributes fell  
25 within the -- the predictable and bounded range of 02:34:18

Page 202

1 physical attributes for cisgender women, would that  
2 raise safety concerns?

3 MR. FRAMPTON: Object to the form.

4 THE WITNESS: There's problems, first of all,  
5 with measurement validity when we're talking about 02:34:33  
6 an unlimited -- kind of an unbounded list of  
7 biological categories. So that's a problem.

8 So I -- I don't -- I think there's an  
9 assumption underneath all of that that says that you  
10 can kind of boil down a transgender and cisgender 02:34:49  
11 female into the exact same categories, and I -- I  
12 don't know that that's true.

13 BY MR. BLOCK:

14 Q Do you know the effects of lowering  
15 testosterone to levels of circulating testosterone 02:35:11  
16 typical of women on all the various physiological  
17 attributes that would play into the analysis of  
18 safety?

19 A That's an evolving area of study, and it  
20 hasn't been completely studied yet, but the -- but 02:35:40  
21 the -- the net effect of the studies that we do have  
22 seem to tilt in the same direction, which is that  
23 there is retained difference.

24 Q In your report, you talk about internal risk  
25 factors and external risk factors; correct? 02:36:32

1 A Correct.

2 Q Okay. And if you look at your report on --  
3 go to section -- on page 33, section VI.

4 A Are you talking about paragraph 57?

5 Q Yeah, yeah. But I'm focusing on the headline 02:37:08  
6 "Enhanced Female Vulnerability to Certain Injuries,"  
7 right? Do you see that?

8 A I see that.

9 Q Okay. And then there's -- there's a  
10 subsection A on concussions and a subsection B on 02:37:23  
11 ACL tears.

12 Are the things discussed in this section an  
13 example of internal risk factors?

14 A Well, I -- you know, when you go back and you  
15 look at the discussion around injury epidemiology, 02:37:45  
16 I -- I think I make it clear that -- that those are  
17 often blended.

18 And so in the case of both concussion and ACL  
19 risk, there are -- there are innate things about the  
20 female that seem to predispose them to those 02:38:04  
21 injuries, but at the same time, those injuries can  
22 be imparted by being struck, so...

23 Q And are -- is there any data on the  
24 susceptibility of transgender girls and women to  
25 those injuries, you know, if they have had puberty 02:38:30

1 blockers followed by gender-affirming hormones?

2 MR. FRAMPTON: Object to the form.

3 THE WITNESS: I'm not aware of research

4 specifically looking at the risk of a transgender

5 female who's prepubertal to ACL risk or concussion 02:38:52

6 risk.

7 Did I say transgender prepu- -- pre- --

8 prepubertal females?

9 BY MR. BLOCK:

10 Q I thought you did. Or at least that's what I 02:39:16

11 understood.

12 A I just wanted to clarify.

13 Q So if you -- turn to page 4 in your report.

14 A Okay.

15 Q On the second -- the -- the -- you know, 02:39:47

16 actually, let's go to Exhibit 81. So this is the

17 first white paper you -- you -- you made. Page 3.

18 It's page 3 of Exhibit 81, on the -- the internal

19 pagination.

20 A Okay. I'm -- I'm there. 02:40:09

21 Q Okay. So this paragraph, it says (as read):

22 "Unfortunately, apart from

23 World Rugby's careful review, the

24 public discourse is lacking any

25 careful consideration of the 02:40:31

Page 205

1 question of safety. As a physician  
2 who has spent my career caring for  
3 athletes, I find this silence about  
4 safety both surprising and  
5 concerning. It is my hope through  
6 this white paper to equip and  
7 motivate sports leagues and policy  
8 makers to give adequate attention to  
9 the issue of safety for female  
10 athletes."

02:40:39

02:40:49

11 Did I read that right?

12 A Yes, you did.

13 Q Okay. And does this white paper disclose  
14 anywhere that you were hired to write it by ADF?

15 MR. FRAMPTON: Object to the form.

02:41:04

16 THE WITNESS: I don't think that that's in  
17 there, no.

18 BY MR. BLOCK:

19 Q Okay. When -- when you say in the white  
20 paper that you find the silence about safety both  
21 surprising and concerning, when did you acquire that  
22 opinion?

02:41:18

23 A I imagine in the context of culling together  
24 this material.

25 Q So you didn't mean to say that you were just

02:41:43

Page 206

1 a doctor listening to the discourse and just spurred  
2 into action organically by your surprising concern  
3 about the lack of discussion of safety?

4 MR. FRAMPTON: Object to the form.

5 THE WITNESS: Well, I think going back to 02:42:05  
6 what we were talking about earlier, I -- I -- you  
7 know, this -- this issue has become more prominent  
8 on the public radar, particularly over the last five  
9 years, and -- you know, so from the beginning, when  
10 I was with AMSSM, you know, those conversations were 02:42:22  
11 cropping up.

12 And as I said earlier, I had some concerns  
13 about the issue of safety when it came to size  
14 differential, but those concerns -- I -- I believe  
15 that those concerns have been validated by review of 02:42:43  
16 the available evidence in conjunction with my  
17 experience as a physician.

18 BY MR. BLOCK:

19 Q Going back to your -- your February 2022  
20 report, on page 7. 02:43:11

21 A Okay.

22 Q So in this paragraph, you discuss various  
23 sports that fall within your definition of contact  
24 or collision, and I wanted to --

25 A What -- what page are you on? 02:43:41

Page 207



1 Q Page 7 of your February 22 report,  
2 Exhibit 80.

3 Oh, no, I'm sorry --

4 A I'm not seeing that.

5 Q No, no, no, no. I was looking at the wrong 02:43:57  
6 one, I apologize. It was my -- my fault.

7 This would then be page -- page 9 of your --  
8 of that one.

9 A Okay.

10 Q So you're -- you're discussing here -- you're 02:44:21  
11 listing various sports that fall within your  
12 definition of collision and contact.

13 A Uh-huh.

14 Q And we have boxing, wrestling, rugby,  
15 ice hockey, football, basketball. And then we also 02:44:36  
16 have mixed martial arts, field hockey, soccer,  
17 rugby, lacrosse, volleyball, baseball and softball.

18 Do you think that the increased risk that you  
19 talk about is equally present to the same degree in  
20 all of these sports that you list? 02:45:05

21 A No, I wouldn't say that.

22 Q Okay. So there's some contact in collision  
23 sports where there's a greater increased risk than  
24 another contact in collision sports; right?

25 A That's correct. 02:45:17

Page 208

1 Q Which of these contact and collision sports  
2 do you think have the least degree of increased  
3 risk?

4 A Of the sports listed there, I would -- I -- I  
5 would qualify this and say -- you know, I would need 02:45:39  
6 to rely on epidemiological statistics, but I would  
7 guess that in terms of traumatic injury, volleyball  
8 is probably near the bottom.

9 MR. BLOCK: If you could just give me another  
10 five minutes, I'll -- I'll just come back with any 02:46:21  
11 remaining questions I have.

12 Can -- can we go off the record?

13 THE VIDEOGRAPHER: We are off the record at  
14 2:46 p.m., Central Time.

15 (Recess.) 02:56:18

16 THE VIDEOGRAPHER: We are on the record at  
17 2:56 p.m., Central Time.

18 BY MR. BLOCK:

19 Q Okay. So just a few more questions,  
20 Dr. Carlson, but I won't keep you too much longer. 02:56:31

21 If you could go to -- oh, jeez. I thought I  
22 had the paper -- page -- this is it. Page 28 of  
23 your -- of Exhibit 80, your February 2022 report.

24 A Page 28?

25 Q Yeah. Paragraph 49. 02:57:09

1 A Okay.

2 Q Just four lines down, you -- you say, in a  
3 parenthetical, that prime athletic years are ages 18  
4 to 29.

5 Do you see that? 02:57:43

6 A Yes.

7 Q Could you explain why those are the prime  
8 athletic years?

9 A Well, it's -- I don't recall offhand how I  
10 came to include that in, so... But looking at it, 02:58:04  
11 it's roughly from the age of the end of puberty  
12 through your third decade. That makes sense to me.

13 Q Why does it make sense to you that the prime  
14 athletic years would begin roughly at the age of the  
15 end of puberty? 02:58:25

16 A We -- we've already spoken somewhat to the  
17 effect of puberty on performance.

18 Q So the -- the further along on -- you are on  
19 puberty, the greater effect it will have on your  
20 performance? 02:58:50

21 A I -- I think that that term -- or that --  
22 that phrase could be rephrased in -- in other ways.  
23 Because obviously it depends on the sport; right?  
24 So take gymnastics, for example, the prime years for  
25 an Olympic gymnast are not going to fall in that 02:59:16

Page 210

1 range.

2 Q Do you think that a trans girl has an  
3 athletic advantage over a cisgender girl in girls'  
4 gymnastics?

5 A I have never --

02:59:30

6 MR. FRAMPTON: Object to the form.

7 Go ahead.

8 THE WITNESS: I have never considered that.

9 BY MR. BLOCK:

10 Q Well, sitting here, considering it now, can 02:59:40  
11 you -- what's your opinion?

12 A Do I think a trans girl has an advantage over  
13 a cis girl in women's gymnastics?

14 Q Yes.

15 MR. FRAMPTON: Object to the form.

02:59:50

16 Go ahead.

17 THE WITNESS: It would depend on the  
18 apparatus that you're talking about, I suppose. For  
19 instance, assuming that that individual may have an  
20 advantage in vault. But again, you're -- we're 03:00:08  
21 talking about anecdotal hypothesis about individuals  
22 and not population, so -- you know, I -- I don't  
23 know that I can really answer that question.

24 BY MR. BLOCK:

25 Q Well, at a population level, do you think 03:00:26

Page 211

1 transgender girls have an athletic advantage over  
2 cisgender girls in girls gymnastics?

3 MR. FRAMPTON: Same objection, form and  
4 scope.

5 Go ahead. 03:00:36

6 THE WITNESS: Certainly not all the way  
7 around, but there may be aspects of different events  
8 in gymnastics that they -- they may have a -- they  
9 may have some advantage within.

10 BY MR. BLOCK: 03:00:56

11 Q So are you -- would you -- do you feel  
12 confident in that answer? I know I just asked you  
13 to give it off the top of your head, so is that, you  
14 know, an answer that you -- you feel sure about  
15 or -- 03:01:07

16 A Well, that study -- that -- that has never  
17 been looked at, as far as I'm aware, in a  
18 peer-reviewed study, but to the extent that you're  
19 making me answer it, I think I've given you an  
20 answer. 03:01:20

21 Q Okay. If you could go to --

22 A Sorry, I didn't hear you.

23 Q No, sorry, I -- I -- I stopped my sentence  
24 halfway through.

25 If you can go to page 59. 03:01:47

Page 212

1 A Okay.

2 Q Okay. So in the second sentence of that  
3 paragraph, you say (as read):

4 "While, as I have noted, some  
5 biological males have indeed 03:02:20  
6 competed in a variety of girls' and  
7 women's contact sports, the numbers  
8 up till now have been small."

9 Excuse me.

10 "But recent studies have reported 03:02:31  
11 very large increases in the number  
12 of children and young people  
13 identifying as transgender compared  
14 to historical experience. For  
15 example, an extensive survey of 9th 03:02:39  
16 and 11th graders in Minnesota found  
17 that 2.7% identified as transgender  
18 or gender-nonconforming— well over  
19 100 times historical rates..."

20 And you cite that to Rider 2018 for that. 03:02:54  
21 Did I read that right?

22 A I believe so.

23 Q Okay. Well, first of all, are you aware of  
24 any statistics about the number of people  
25 identifying as transgender in West Virginia? 03:03:07

Page 213

1           A    I believe I have read at some point in time  
2           that the percentage of transgender-identifying  
3           people in West Virginia is high to the national  
4           average.

5	Q	Okay. How about transgender youth?	03:03:26
---	---	------------------------------------	----------

6           A    I -- I can't remember if what I read was  
7           specific to transgender youth or not.

8 Q And do you know whether any transgender girl  
9 besides the plaintiff in this case has ever competed  
10 in girls or women's sports in West Virginia? 03:03:42

11           A    Again, I couldn't speak to that.

12 Q Okay. So --

13           A    I was -- I wasn't retained for that, so I  
14    don't know.

15	Q So this -- this study by Rider 2018, in	03:03:52
16	Minnesota, do you know what percentage of the	
17	2.7 percent of students in that study identified as	
18	transgender as opposed to gender nonconforming?	

19 A I don't recall that, no.

20	Q	Okay. Do you recall ever looking it up?	03:04:19
----	---	---	----------

21           A    I'm sure at -- at some point I did look it  
22   up, but I don't recall what the number is.

23 MR. BLOCK: Okay. So if you could check your  
24 inbox -- I mean, exhibit box, Exhibit 85. We can  
25 look at it together. Let me know when you see it. 03:04:57

1 (Exhibit 85 was marked for identification  
2 by the court reporter and is attached hereto.)

3 THE WITNESS: I said I have it up.

4 BY MR. BLOCK:

5 Q Okay. Great. Could you go to page 2. 03:05:20

6 A I'm there.

7 Q Okay. So if you -- just scroll down to --  
8 just -- actually, you don't even have to scroll  
9 down. The second sentence on page 2, where it  
10 describes -- it begins with "gender nonconforming." 03:05:41

11 A Yes.

12 Q Okay. So page -- so this sentence says (as  
13 read):

14 "Gender nonconforming describes  
15 individuals whose gender expression 03:05:54  
16 does not follow stereotypical  
17 conventions of masculinity and  
18 femininity and who may or may not  
19 identify as transgender."

20 Do you see that? 03:06:04

21 A Yes, I see that.

22 Q Okay. Do you think that -- to the extent  
23 that the study is talking about gender nonconforming  
24 people, do you think it's still relevant to  
25 assessing an increase in transgender people 03:06:17

Page 215



1 participating in girls and women's sports?

2 MR. FRAMPTON: Object to the form.

3 THE WITNESS: I -- the definition that you

4 just read for me is not the same thing as a

5 transgender individual as you've defined it. 03:06:38

6 BY MR. BLOCK:

7 Q Okay. Now, if you go to -- if you go to the

8 first page of the study, for the abstract, if you go

9 to "Results."

10 A Yes, I see that. 03:07:17

11 Q So it says (as read):

12 "We found that students who are TGNC

13 reported significantly poorer

14 health, lower rates of preventative

15 health checkups, and more nurse 03:07:26

16 office visits than cisgender youth.

17 Do you see that?

18 A I do see that.

19 Q All right. As a general matter, at a

20 population level, if a group of folks reports 03:07:38

21 significantly poorer health than a control group, is

22 that usually a sign of athletic advantage?

23 MR. FRAMPTON: Object to the form.

24 Go ahead.

25 THE WITNESS: That's so far removed from 03:07:55

Page 216

1 specifics of athletic advantage that I don't know  
2 that I can answer that, what -- what -- what plays  
3 into poorer health.

4 BY MR. BLOCK:

5 Q Okay. Well, do -- do you think that having a 03:08:15  
6 poor -- poorer health -- well, what connection do  
7 you have -- do you see, if any, between, you know,  
8 someone having poorer health and being a good  
9 athlete?

10 MR. FRAMPTON: Object to the form. 03:08:35

11 THE WITNESS: Again, I -- I think without  
12 knowing how poorer health is defined here, I  
13 hesitate to answer that question.

14 BY MR. BLOCK:

15 Q Okay. Well, is it fair to say that there are 03:08:47  
16 a variety of ways in which, at a population level,  
17 the -- the health of transgender girls and women may  
18 be different than the health of cisgender boys and  
19 men?

20 MR. FRAMPTON: Same objection. 03:09:10

21 THE WITNESS: Again, I'm a board-certified  
22 sports medicine physician, I'm not an  
23 endocrinologist, and you're asking questions about  
24 population distinctions between transgender and  
25 cisgender individuals. I don't know that I was 03:09:24

Page 217

1 retained to ask -- answer those questions.

2 BY MR. BLOCK:

3 Q So -- so you can't offer an expert opinion on

4 how similar or dissimilar transgender girls and

5 women are to cisgender boys and men --

03:09:43

6 MR. FRAMPTON: Object to --

7 THE WITNESS: I didn't --

8 MR. FRAMPTON: -- the form.

9 THE WITNESS: -- say that. You were asking

10 me about their population -- the reflection of

03:09:53

11 overall health on that population versus cisgender.

12 Is that what you're asking me?

13 BY MR. BLOCK:

14 Q Well, I asked you that, and then I asked you

15 another question, which is, you know, the basis for

03:10:10

16 your expert opinion opining on the similarities

17 between cisgender girls and women -- excuse me. I

18 was asking the basis for your expert opinion opining

19 on the similarities between transgender girls and

20 women and cisgender boys and men.

03:10:27

21 A Between trans- --

22 MR. FRAMPTON: Object to the form.

23 Go ahead.

24 THE WITNESS: Between transgender boys and

25 women, is that what you said?

03:10:39

Page 218

1 BY MR. BLOCK:

2 Q Transgender girls and women compared to  
3 cisgender boys and men. What's the basis of your  
4 expertise in drawing a comparison between those two  
5 groups of people? 03:10:52

6 A So you're talking about trans women --

7 Q Yes.

8 A -- or trans men?

9 Q Sorry, I'm talking about trans girls and  
10 women and cis -- 03:11:01

11 A Can you rephrase --

12 Q -- boys and men --

13 A -- the question because I'm not sure -- I  
14 want to understand what you're saying.

15 Q Yeah. People assigned a male sex assigned at 03:11:09  
16 birth who have female gender identities are the  
17 people I'm referring to as trans girls and women.

18 A Okay.

19 Q And my question is, do you have any expert  
20 basis to opine on how similar that group of people 03:11:30  
21 are to cisgender boys and men?

22 MR. FRAMPTON: Object to the form.

23 Go ahead.

24 THE WITNESS: Yes, I do.

25 ///

1 BY MR. BLOCK:

2 Q And what -- what is that expert basis? What  
3 is the basis for that expert opinion?

4 A I'm a board-certified sports medicine  
5 physician, and I can speak to the safety issues 03:11:53  
6 involved with these two populations.

7 Q But are you -- you don't -- what information  
8 do you have about the -- you know, the -- the health  
9 and physical profile of transgender girls and women?

10 MR. FRAMPTON: Object to the form. 03:12:12

11 THE WITNESS: I think I told you that, A, I  
12 was retained to speak to the issues around these  
13 populations that deal with sports safety.

14 BY MR. BLOCK:

15 Q And -- okay. So what's the basis of your 03:12:42  
16 ability to render an expert opinion, though?

17 MR. FRAMPTON: Object to the form.

18 Go ahead.

19 THE WITNESS: Sure, I understand the  
20 question. I'm sorry. 03:12:55

21 I -- I'm not sure how that relates to what  
22 we're looking at here.

23 BY MR. BLOCK:

24 Q Sure. Sure. And I -- I -- I won't keep you  
25 too much longer. 03:13:06

Page 220

1 I understand everything you've opined on in  
2 your report about cisgender boys and men and their  
3 differences between cisgender girls and women. You  
4 know, this case is about transgender girls and women  
5 and that population, you would agree, is different 03:13:26  
6 in some ways, at least, from cisgender boys and men;  
7 right?

8 MR. FRAMPTON: Object to the form.

9 Go ahead.

10 THE WITNESS: There aren't population-level 03:13:35  
11 studies that have really looked at that. You can --  
12 so I don't know that we can say that.

13 BY MR. BLOCK:

14 Q So without population studies that have  
15 looked at transgender girls and women, we can't say 03:13:57  
16 whether they are the same as cisgender boys and men;  
17 right?

18 MR. FRAMPTON: Object to the form.

19 THE WITNESS: Are you saying that -- are you  
20 asking if there are baseline characteristic 03:14:18  
21 differences between transgender women and cisgender  
22 women?

23 BY MR. BLOCK:

24 Q Sure. That's one of them. Sure, yes. No,  
25 no, no, no. No. I'm asking between transgender 03:14:35

1 women and cisgender men.

2 Are there baseline differences between  
3 transgender women and cisgender men?

4 A We don't have good studies that were designed  
5 to look at large populations to answer baseline 03:14:51  
6 questions. We have inferences we can make about  
7 certain studies. That's it.

8 Q Okay.

9 MR. BLOCK: All right. Thank you,  
10 Dr. Carlson. That's all the questions I have. 03:15:02

11 THE WITNESS: Thank you.

12 THE VIDEOGRAPHER: Any other questions?

13 MR. TRYON: This is Dave --

14 THE VIDEOGRAPHER: Okay.

15 MR. TRYON: This is Dave Tryon from the State 03:15:13  
16 of West Virginia. I -- I have no questions for the  
17 witness.

18 MR. CROPP: This is Jeffrey Cropp for the  
19 defendants Harrison County Board of Education and  
20 Superintendent Dora Stutler. I have no questions. 03:15:24

21 MS. MORGAN: This is Kelly Morgan on behalf  
22 of the West Virginia Board of Education and  
23 Superintendent Burch. I have no questions.

24 Thank you very much.

25 MS. GREEN: This is Roberta Green on behalf 03:15:36

1 of WVSSAC. I have no questions.

2 Thank you.

3 THE VIDEOGRAPHER: We are off the record

4 at --

5 MR. FRAMPTON: Hang on. Hang on. Hang on. 03:15:50

6 Hang on.

7 I have -- I think I've got probably one just

8 to follow-up on Mr. Block's last question.

9 Dr. Carlson, do we have information on

10 whether there are retained physical advantages when 03:16:04

11 people undergo a transition from -- undergo a

12 transition from male to female?

13 MR. BLOCK: Objection to form.

14 THE WITNESS: Yes.

15 MR. FRAMPTON: Okay. That's all I had. 03:16:19

16 MR. BLOCK: All right. So I have another

17 question.

18 BY MR. BLOCK:

19 Q What -- can you please describe the studies

20 that we have that provide information that form the 03:16:36

21 basis of your answer to counsel's question?

22 A Retained differences in -- well, the Roberts

23 study, for one. The Roberts study showed retained

24 differences in speed.

25 Q Are there any others? 03:17:12



1           A     There are -- there are studies that look at  
2     retained differences in -- in muscle mass and -- so  
3     the Wiik study.

4 Q And we don't --

5	A	Many of these are cited in my report.	03:17:51
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6 Q And -- and we don't have any studies on the  
7 differences between transgender girls and women and  
8 cisgender boys and men before transition, do we?

9 MR. FRAMPTON: Object to the form.

10	Go ahead.	03:18:08
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11 THE WITNESS: Say that one more time.

12 BY MR. BLOCK:

13 Q We don't have any studies on the differences  
14 between transgender girls and women and cisgender  
15 boys and men before transition, do we? 03:18:16

16 MR. FRAMPTON: Same objection.

17	Go ahead.
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18 THE WITNESS: I don't believe -- again, I  
19 can't recall if the Klaver study made that  
20 comparison, so I'd have to go back and look at it. 03:18:46

21 MR. BLOCK: No further questions.

22 THE VIDEOGRAPHER: Anyone else?

23 MR. FRAMPTON: I don't have anything further.

24 THE VIDEOGRAPHER: We are off the record at

25 3:19 p.m., Central Time. This completes today's 03:19:02

1 deposition of Dr. Chad Carlson.

2 The total number of media units used was  
3 eight and will be retained by Veritext Legal  
4 Solutions.

5 (TIME NOTED: 3:19 p.m.)

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